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2012-08-09

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DELTA
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F1
F2
F3
F4

DOP eServer User Manual

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2012/07/19	eServer-003	1. Fixed ODBC setting interface for Wizard. 2. Fixed Excel setting interface for Wizard. 3. Fixed Tools > Options > Disconnect interface of function menu. (P3-10) 4. Fixed Screen Editor example to DOPSoft example. 5. Add Tool > Options > Environment interface of function. (P3-10) 6. Add Excel **Overwrite the file when saving** and **Other setting** function. (P4-16~P4-20) 7. Add **Recipe Auto Refresh on Startup** function. (P11-4~P11-5), (P12-5, P12-11, P12-16~P12-17, P12-19, P12-25, P12-27~P12-28, P12-32~P12-33)

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About this Manual...

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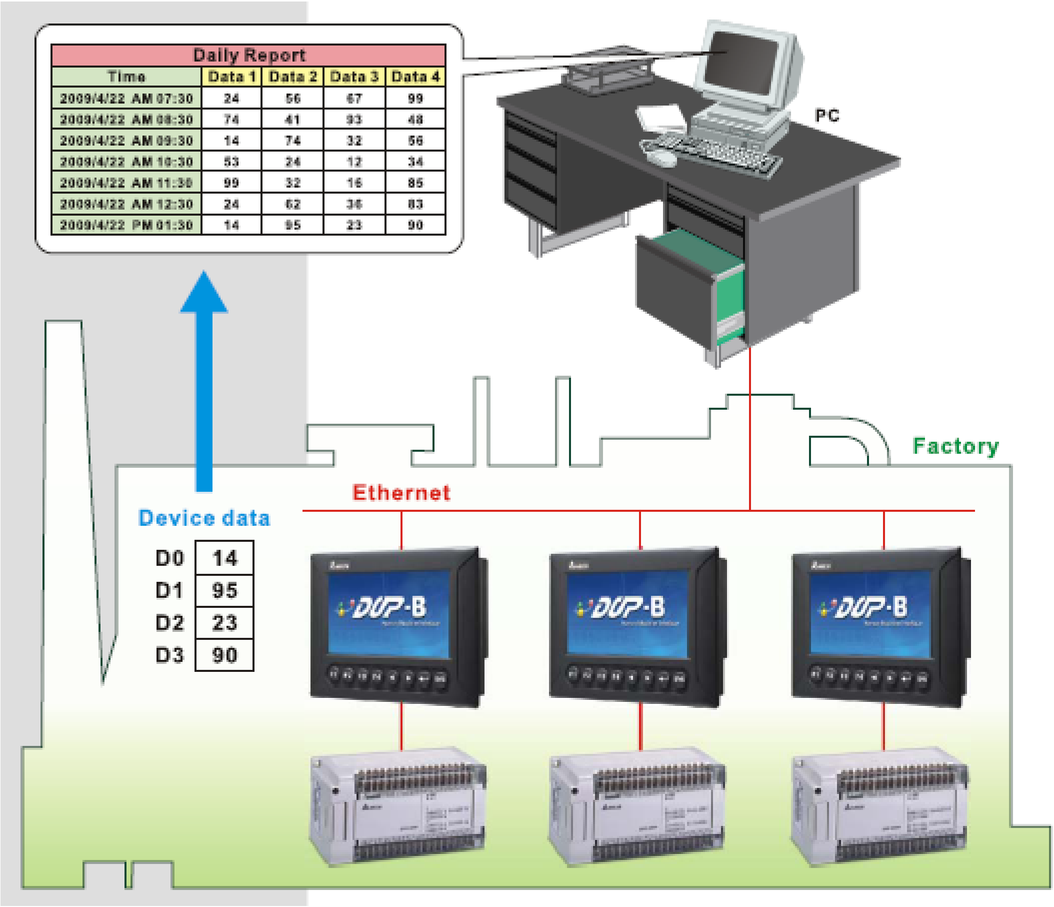
Chapter 1 Introduction

1.1 eServer Data Collection Software

eServer is a PC software used to help the customers collect and transfer production information and history data directly from production site to a PC in the office via Ethernet. eServer also supports Microsoft Excel (hereinafter “Excel”) software functions, such as formulas, tables and graphs. This allows that the collected data can be saved in user-defined Excel file according to various purposes for the customers to easily and quickly create required production reports. In addition, it also supports ODBC interface which is able to save the collected data to a database for the purpose of management and use in production sites.



Daily Report				
Time	Data 1	Data 2	Data 3	Data 4
2009/4/22 AM 07:30	24	56	67	99
2009/4/22 AM 08:30	74	41	93	48
2009/4/22 AM 09:30	14	74	32	56
2009/4/22 AM 10:30	53	24	12	34
2009/4/22 AM 11:30	99	32	16	85
2009/4/22 AM 12:30	24	62	36	83
2009/4/22 PM 01:30	14	95	23	90

Device data

D0	14
D1	95
D2	23
D3	90

1.2 Supported Models

The supported models for eServer Data Collection Software are listed in the table below.

Series	Model Name	Remark
DOP-AE Series	DOP-AE57BSTD	DOP series Extension Ethernet Module, DOP-EXLNHJ1AE is required when using eServer with DOP-AE series HMI product.
	DOP-AE57GSTD	
	DOP-AE57CSTD	
	DOP-AE80THTD1	
	DOP-AE10THTD1	
DOP-B Series	DOP-B07E415	
	DOP-B07E515	
	DOP-B08E515	
	DOP-B10E615	

1.3 System Requirement

Below are the system requirements to comply with the operating environment of eServer:

Hardware / Software	System Requirement
CPU	Pentium 4, 1.6GHz or greater is recommended
Memory	1GB and above is recommended
Hard Disk	Capacity: 50MB and above
Monitor	Support resolution: 1024 × 768 or higher full-color display.
Printer	Printer compatible with Windows 2000 / Windows XP / Windows Vista / Windows 7
Operation System	Windows 2000 / Windows XP / Windows Vista / Windows 7
Supported Microsoft Office Software	Microsoft Office 2000 Microsoft Office 2003 Microsoft Office 2007

Chapter 2 Software Installation

2.1 eServer Setup

In this chapter, it will introduce general functions of eServer with Windows. The users can use it to design what they want. Detail information for each function will be discussed in the following chapters.

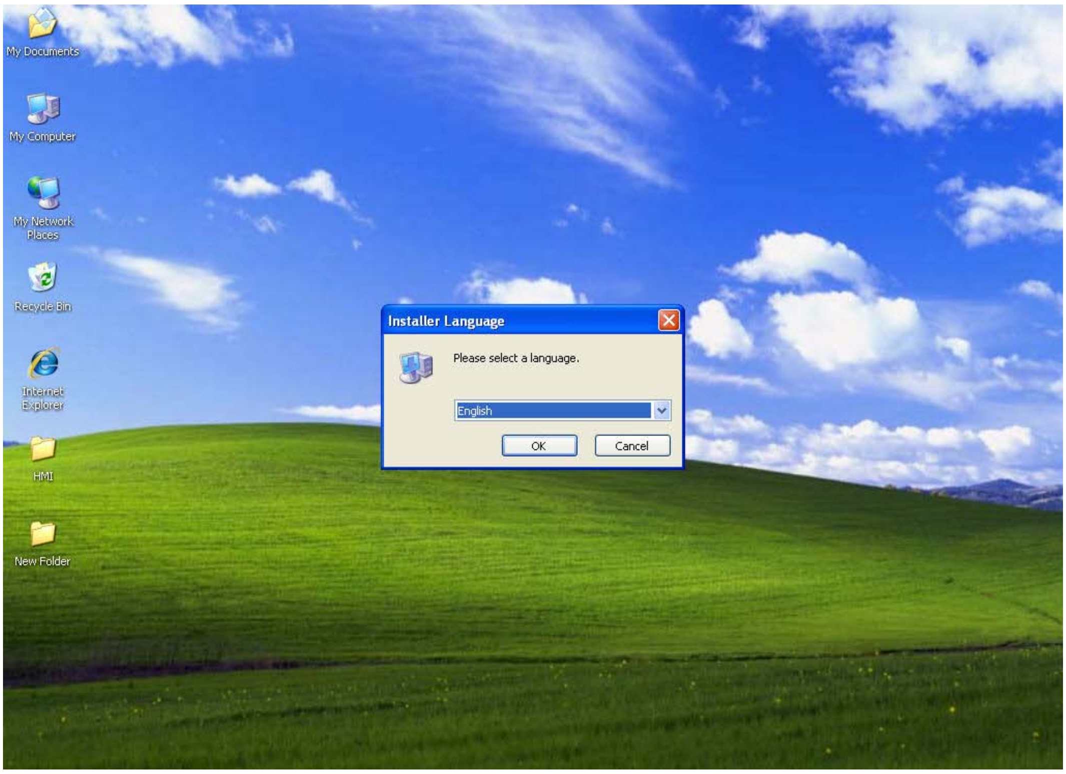
2.1.1 Software Installation

To start the eServer setup, please refer to the following steps:

Step 1. Please start-up your computer to Windows 2000 / Windows XP / Windows Vista / Windows 7 system.

My Documents
My Computer
My Network Places
Recycle Bin
Internet Explorer
HMI
New Folder
start
10:43 AM

Step 2. Execute **setup.exe** from Windows taskbar by clicking **“Start” > “Run”**. After pressing **OK**, the system will setup automatically and the following dialog box will appear for selecting the desired display language.



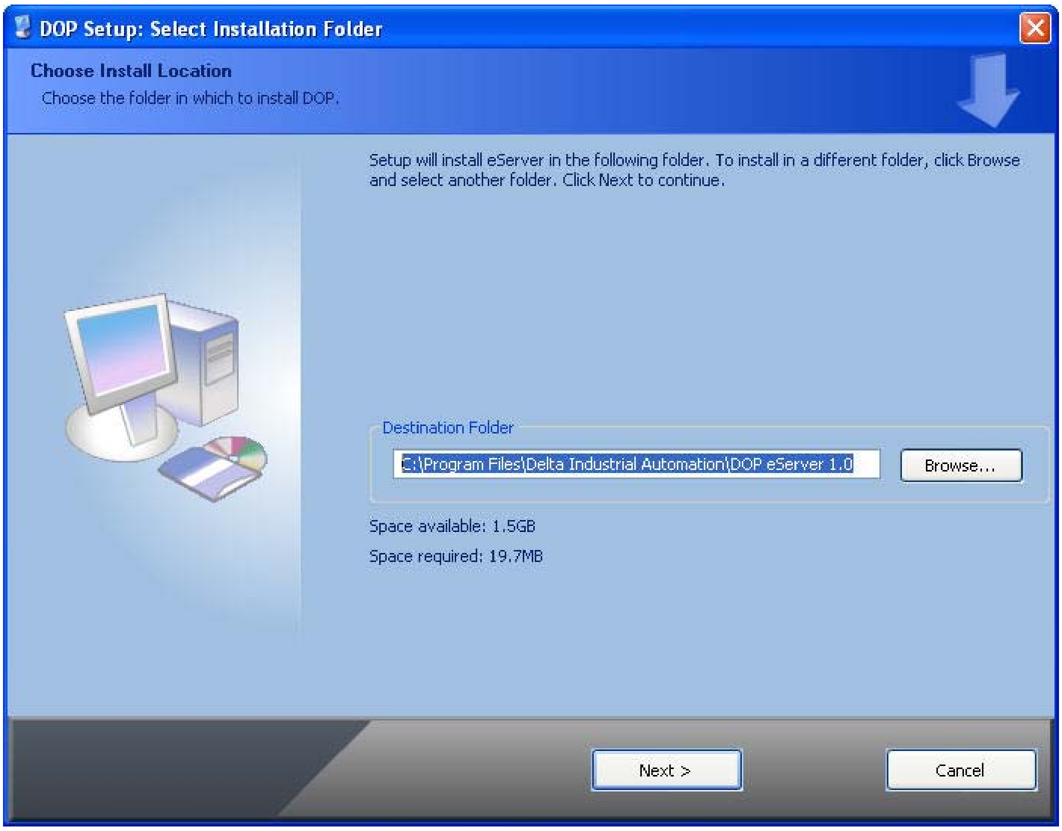
Installer Language

Please select a language.

English

My Documents
My Computer
My Network Places
Recycle Bin
Internet Explorer
HMI
New Folder
OK
Cancel

Step 3. After pressing OK, the system will setup automatically and the users will get the following dialog box to choose destination location.



DOP Setup: Select Installation Folder

Choose Install Location

Choose the folder in which to install DOP.

Setup will install eServer in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.

Destination Folder: C:\Program Files\Delta Industrial Automation\DOP eServer 1.0

Space available: 1.5GB

Space required: 19.7MB

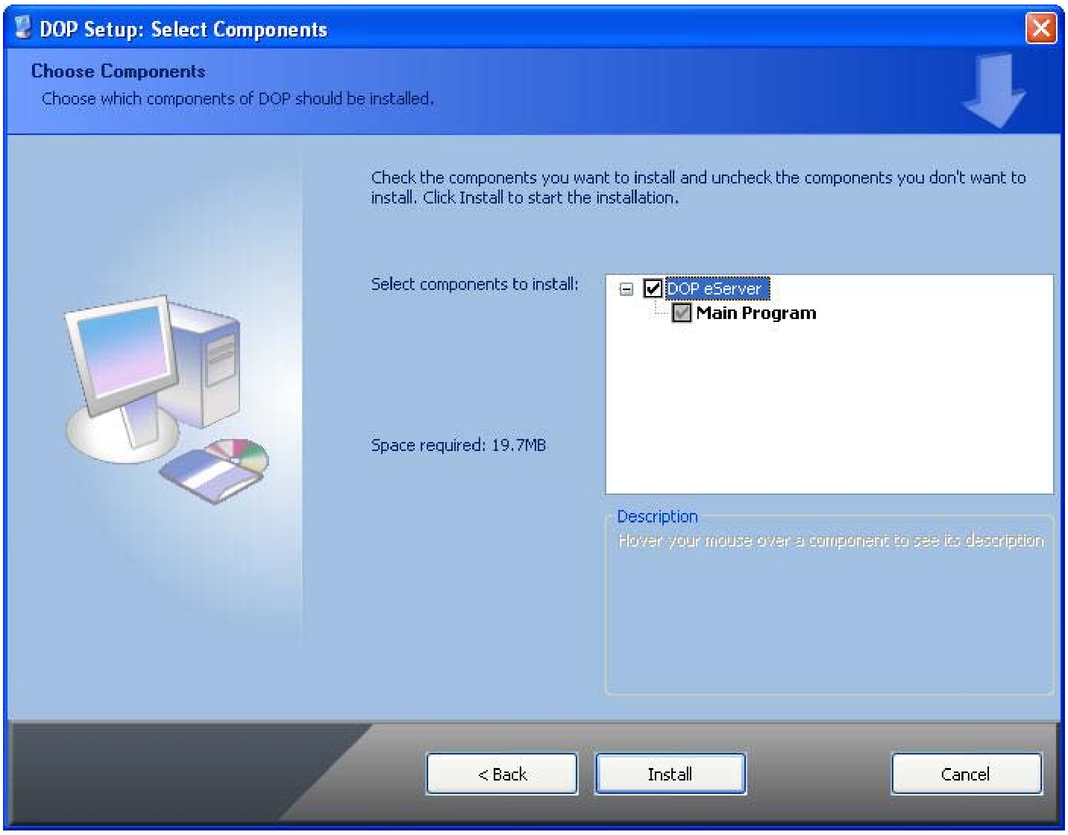
Browse...
Next >
Cancel

To select the default directory **C: \Program Files\Delta Industrial Automation\DOP eServer 1.00.xx**, click **Next>** for the next step. Setup will install in the directory indicated in the Destination Directory box at the bottom of the dialog box.

To select a directory other than the default directory, click **Browse**. A list of available directories appears. Highlight the desired directory for the Delta eServer and click **OK**, then **Next>** for the next step.

If necessary, click **< Back** button to take you back through Setup dialog boxes one by one.

Step 4. After pressing **Next**, the following dialog box will appear and ask the users to select the installation software, i.e. DOP eServer. Then click **Install** button to start DOP eServer installation.



DOP Setup: Select Components

Choose Components

Choose which components of DOP should be installed.

Check the components you want to install and uncheck the components you don't want to install. Click Install to start the installation.

Select components to install:

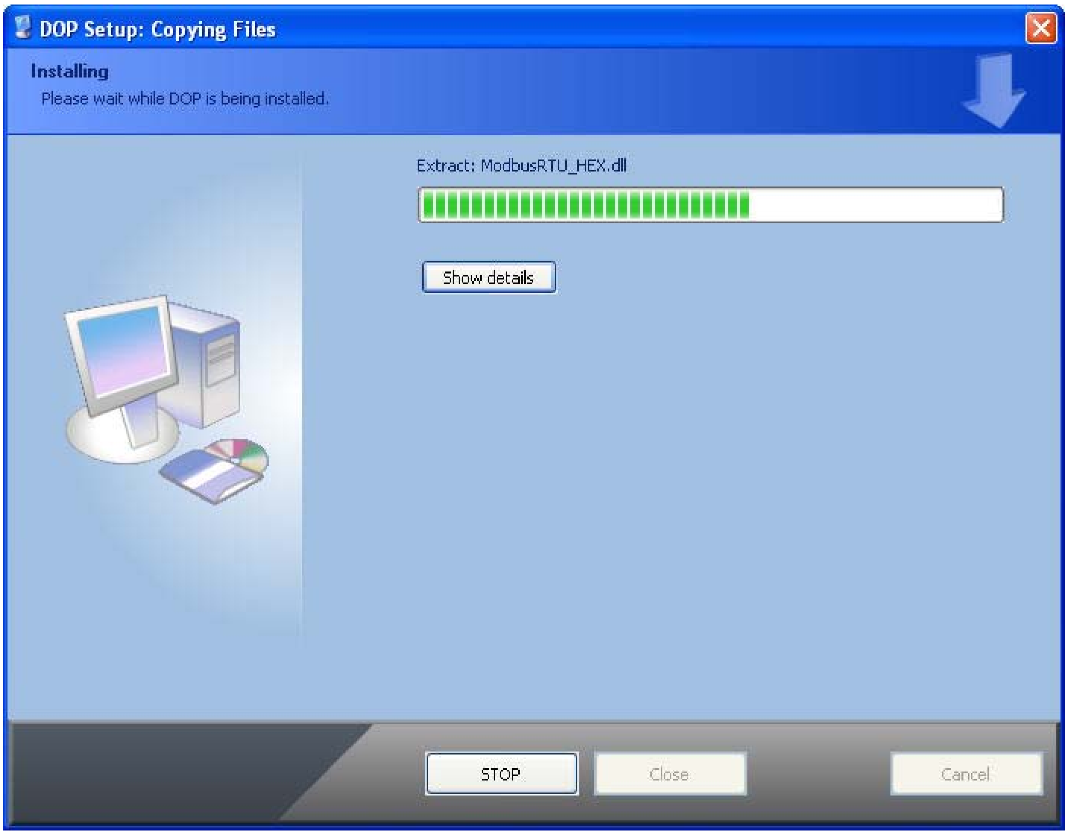
☑ DOP eServer
  ☑ Main Program

Space required: 19.7MB

Description

Hover your mouse over a component to see its description.

Step 5. The system will start DOP eServer Installation.



DOP Setup: Copying Files

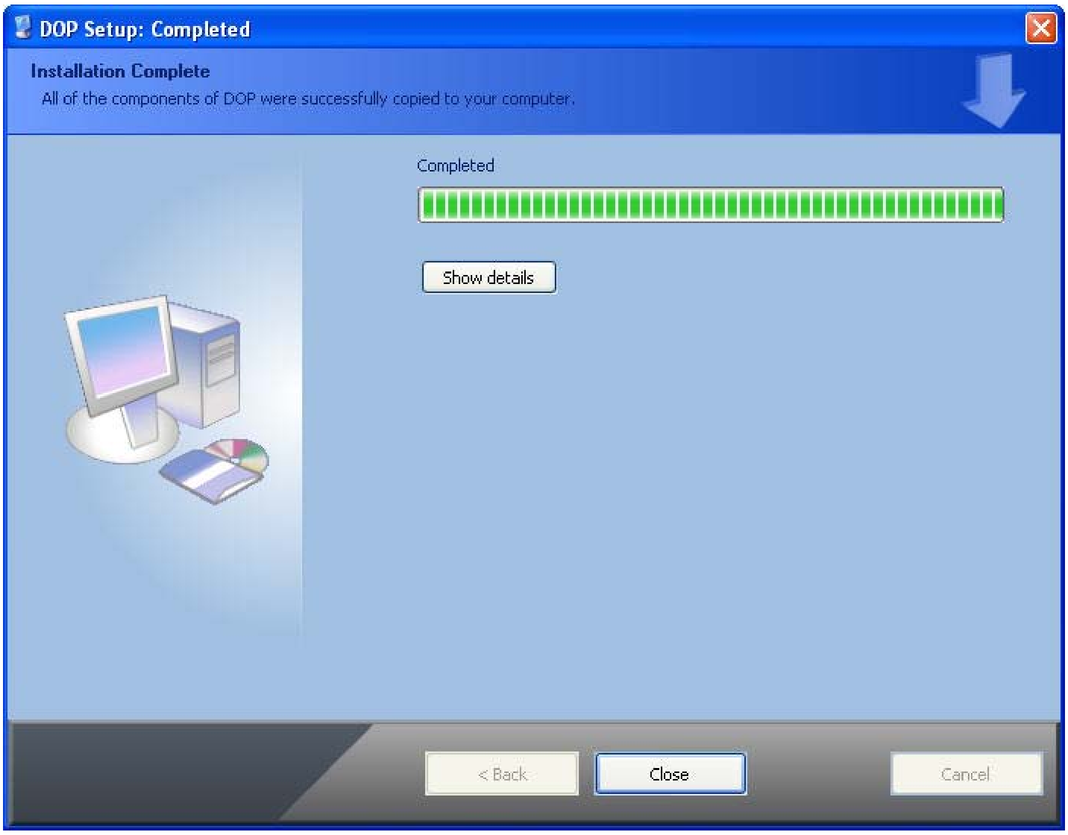
Installing

Please wait while DOP is being installed.

Extract: ModbusRTU_HEX.dll

Show details
STOP
Close
Cancel

Step 6. DOP eServer has been installed successfully. Press **Close** to finish the installation.



DOP Setup: Completed

Installation Complete

All of the components of DOP were successfully copied to your computer.

Completed

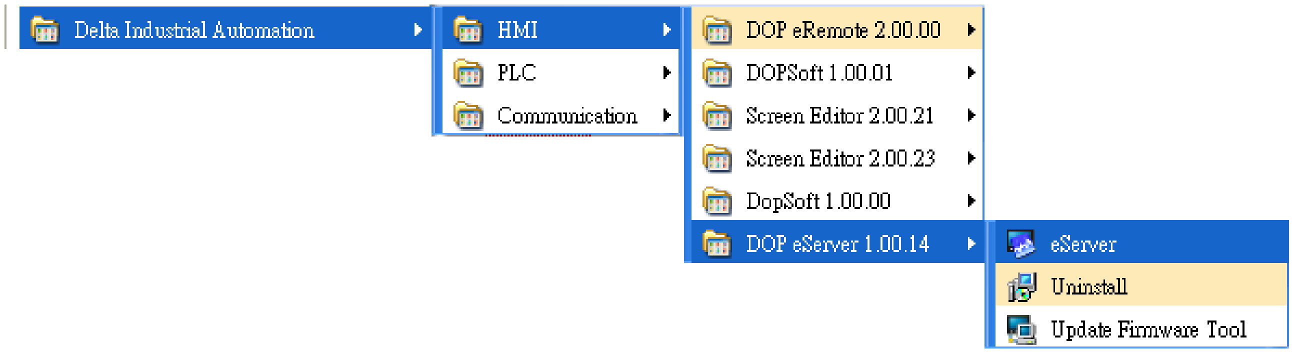
Show details
< Back
Close
Cancel

Chapter 3 Before Using eServer

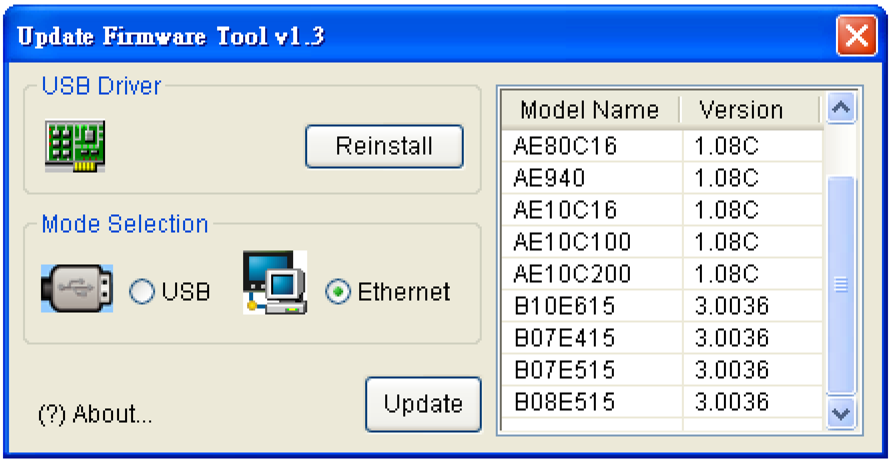
Before using eServer, the users need to update HMI firmware and complete PC and HMI network settings. Please ensure to read the following instructions fully so that the users could understand how to update HMI firmware and complete PC and HMI network settings correctly.

3.1 Update Firmware

Remember to update the firmware before using eServer. To select this function, click **Start > Programs > Delta Industrial Automation > HMI > DOP eServer 1.00.xx > Update Firmware Tool**.


Delta Industrial Automation
HMI
PLC
Communication
DOP eRemote 2.00.00
DOPSoft 1.00.01
Screen Editor 2.00.21
Screen Editor 2.00.23
DopSoft 1.00.00
DOP eServer 1.00.14
eServer
Uninstall
Update Firmware Tool

The system will detect if the HMI firmware is the same as the firmware included in eServer. If the HMI firmware is older than the firmware included in eServer, a warning message will pop up to ask for updating the firmware. After clicking **Update Firmware Tool**, the following dialog box will appear for the users to select the communication interface (the default setting is USB driver). Press **Update** button to update HMI firmware automatically. The function of **Update Firmware Tool** is the same as the function of **Update Firmware** provided in eServer (click **Tool > Update Firmware**).

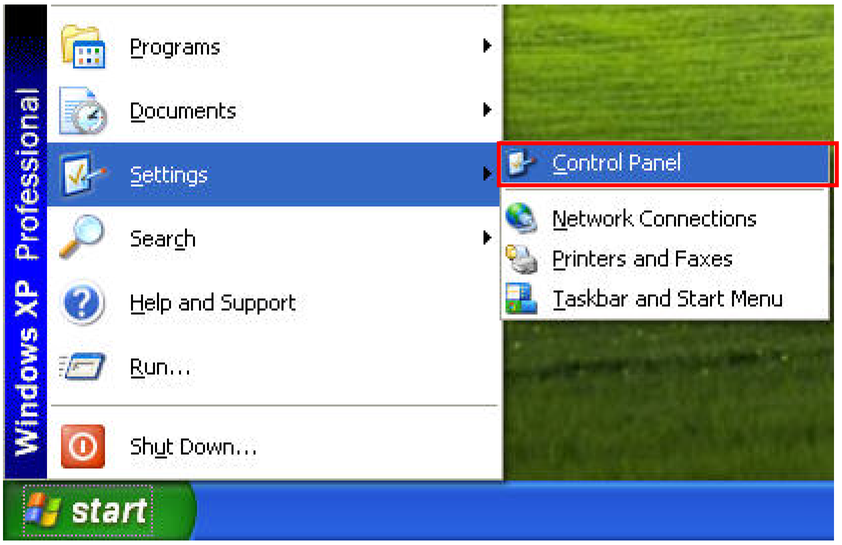

Update Firmware Tool v1.3
USB Driver
Reinstall
Mode Selection
○ USB
● Ethernet
(?) About...
Update

Model Name	Version
AE80C16	1.08C
AE940	1.08C
AE10C16	1.08C
AE10C100	1.08C
AE10C200	1.08C
B10E615	3.0036
B07E415	3.0036
B07E515	3.0036
B08E515	3.0036

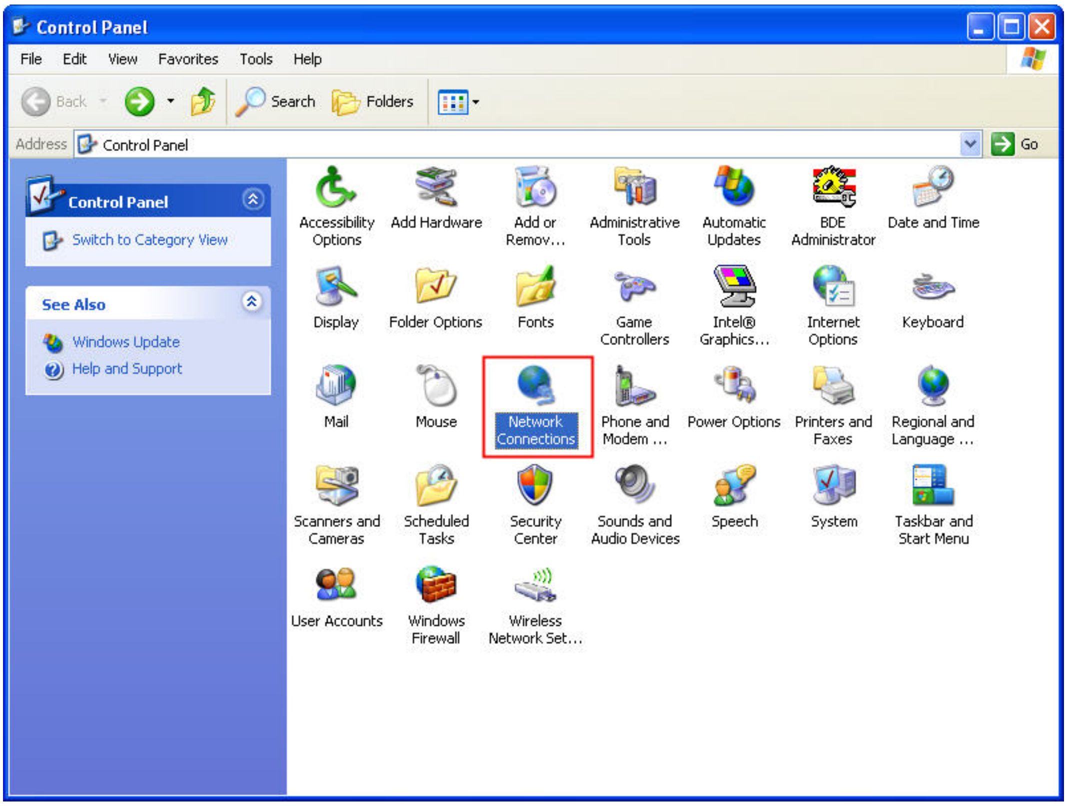
3.2 Networking Settings

Ensure to observe the following instructions to complete PC networking settings before eServer operation.

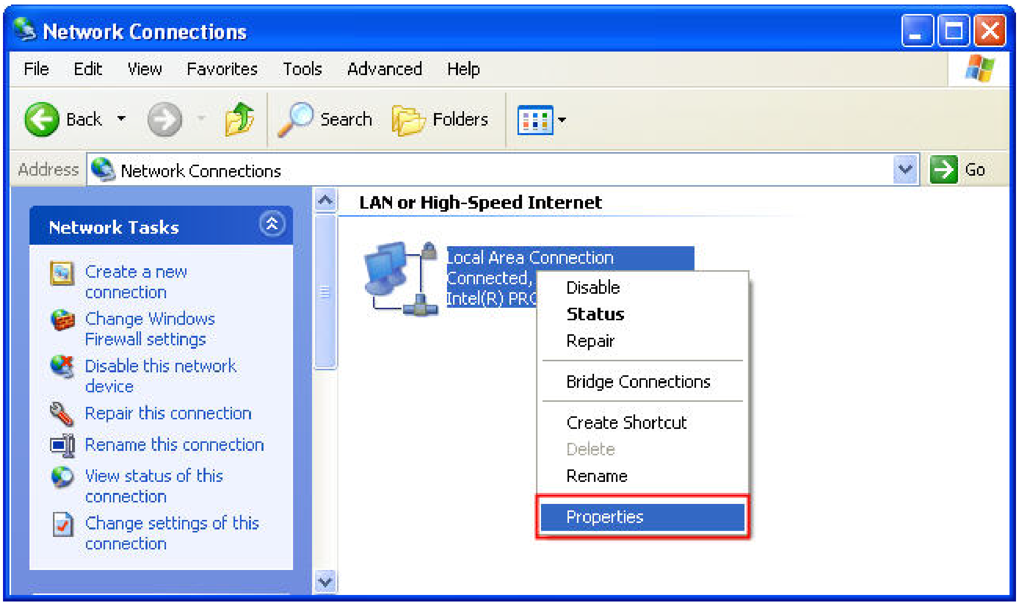
3.2.1 Setting PC Network


Windows XP Professional
Programs
Documents
Settings
Search
Help and Support
Run...
Shut Down...
start
Control Panel
Network Connections
Printers and Faxes
Taskbar and Start Menu

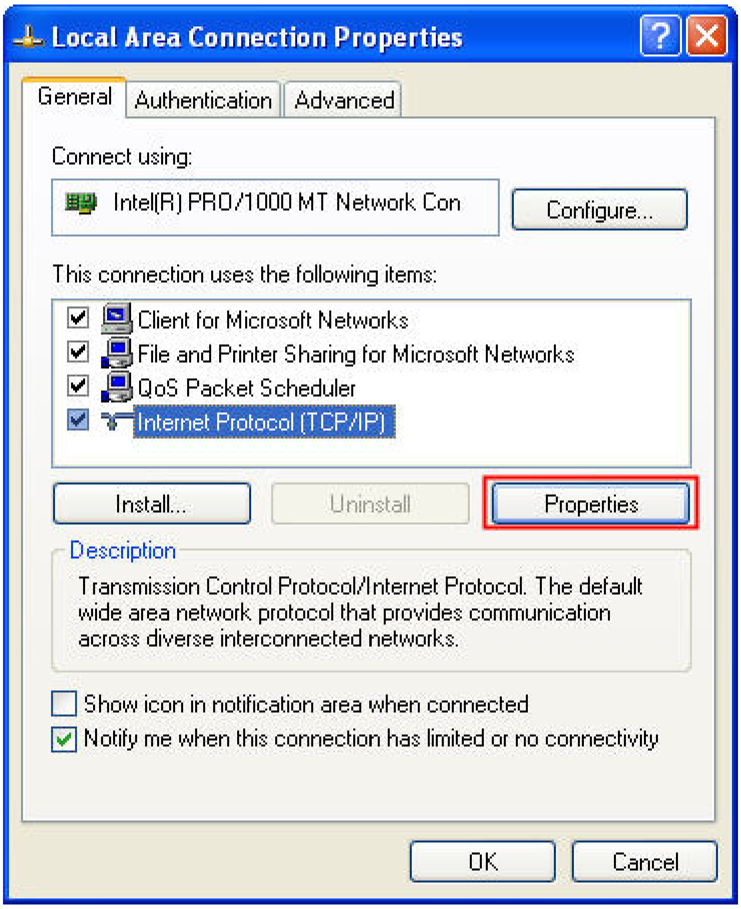
Power on PC and start Windows. Click **Start > Programs**, point to Control Panel, and then select Network Connections (Network Connections).


Control Panel
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
Address
Control Panel
Go
Control Panel
Switch to Category View
See Also
Windows Update
Help and Support
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Automatic Updates
BDE Administrator
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel® Graphics...
Internet Options
Keyboard
Mail
Mouse
Network Connections
Phone and Modem ...
Power Options
Printers and Faxes
Regional and Language ...
Scanners and Cameras
Scheduled Tasks
Security Center
Sounds and Audio Devices
Speech
System
Taskbar and Start Menu
User Accounts
Windows Firewall
Wireless Network Set...

Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.


Network Connections
File Edit View Favorites Tools Advanced Help
Back Search Folders
Address Network Connections Go
Network Tasks
Create a new connection
Change Windows Firewall settings
Disable this network device
Repair this connection
Rename this connection
View status of this connection
Change settings of this connection
LAN or High-Speed Internet
Local Area Connection
Connected,
Intel(R) PRO
Disable
Status
Repair
Bridge Connections
Create Shortcut
Delete
Rename
Properties

The **Local Area Connection Properties** dialog box will open. Use **General** tab to select **Internet Protocol (TCP/IP)**. Then, press **Properties** button.


Local Area Connection Properties
General
Authentication
Advanced
Configure...
Install...
Uninstall
Properties
OK
Cancel

Connect using:

Intel(R) PRO/1000 MT Network Con

This connection uses the following items:

- ☑ Client for Microsoft Networks
- ☑ File and Printer Sharing for Microsoft Networks
- ☑ QoS Packet Scheduler
- ☑ Internet Protocol (TCP/IP)

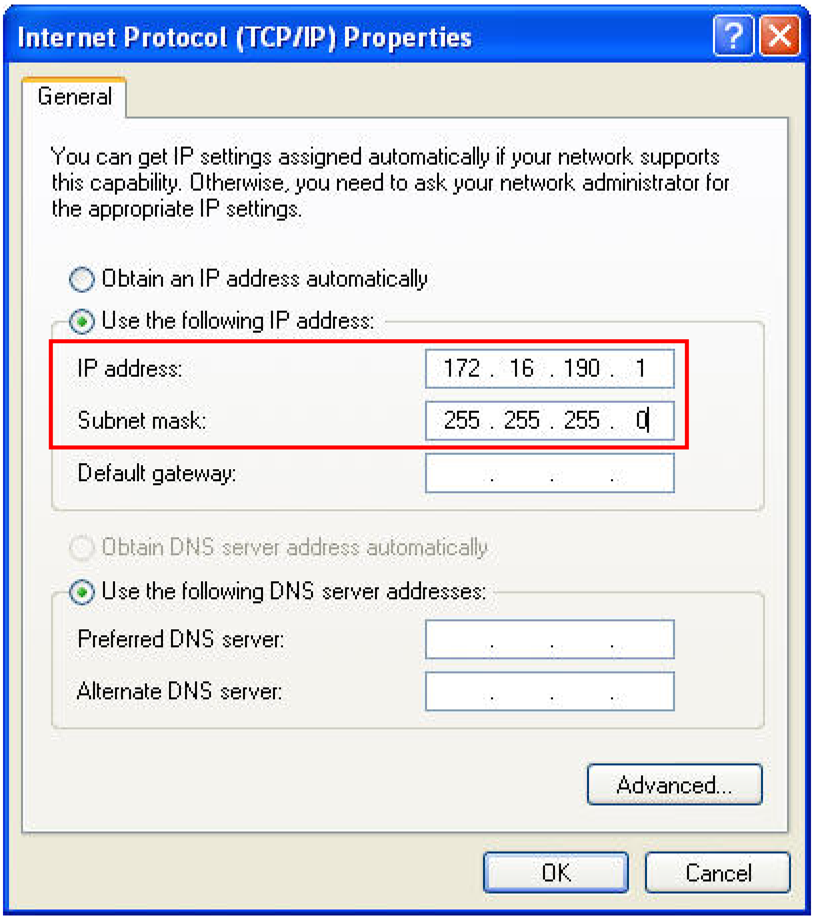
Description

Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in notification area when connected

☑ Notify me when this connection has limited or no connectivity

The **Internet Protocol (TCP/IP) Properties** dialog box will open. Choose **Use the following IP address** and enter the IP address numbers of the PC into the field of **IP address** and **Subnet mask**.



You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically

● Use the following IP address:

IP address: 172 . 16 . 190 . 1

Subnet mask: 255 . 255 . 255 . 0

Default gateway: . . .

○ Obtain DNS server address automatically

● Use the following DNS server addresses:

Preferred DNS server: . . .

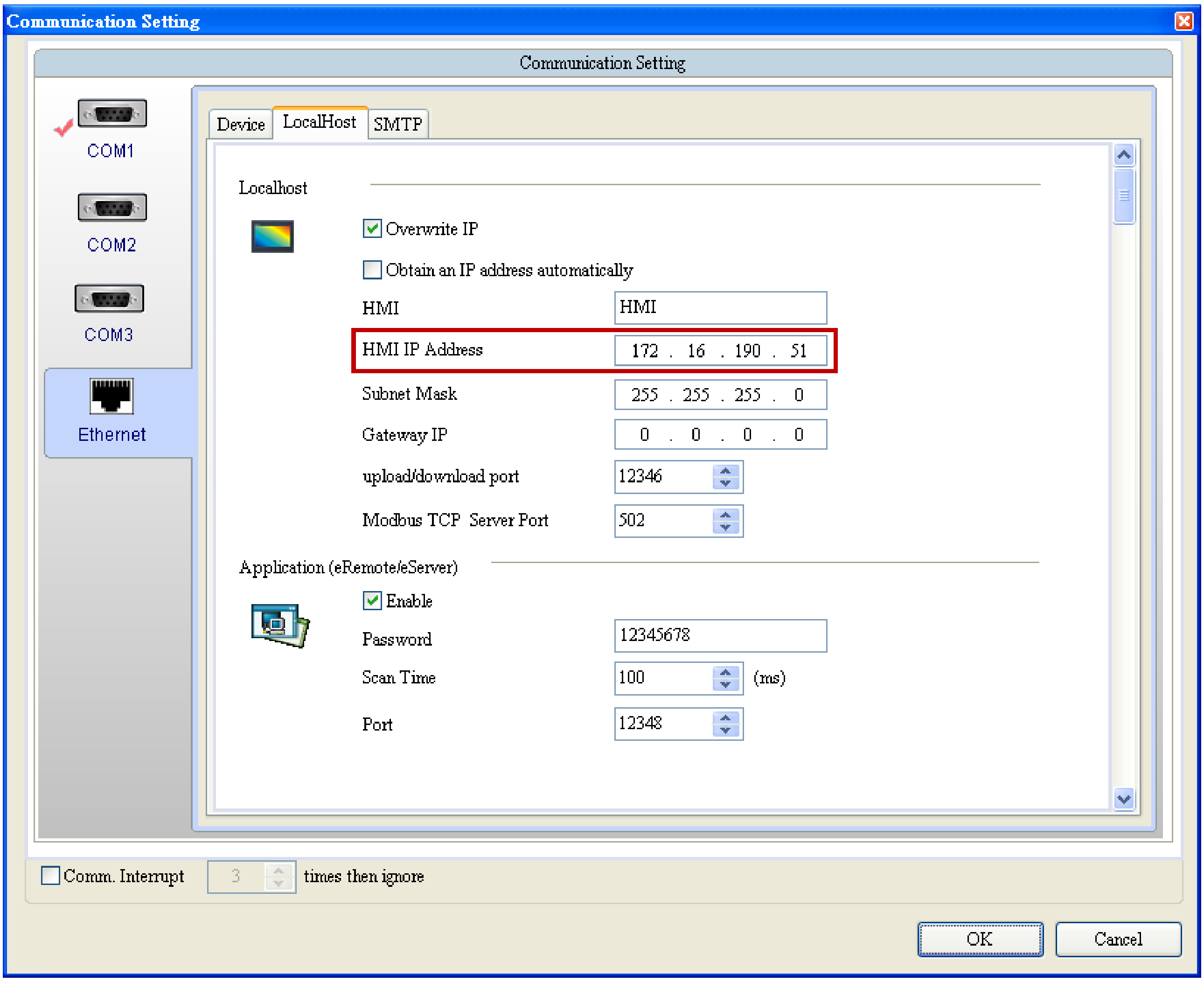
Alternate DNS server: . . .

Then, press **OK** button to finish the settings.

Please note that if the IP address numbers of subnet masks of the PC and HMI are different, HMI may not be displayed in the list when finding node.

3.2.2 Setting HMI Network

Start DOPSoft software program and click **Options > Communication Setting > Ethernet > LocalHost**, set HMI IP Address and check the Application(eRemote / eServer) function **Enable.**


Communication Setting
Communication Setting
COM1
COM2
COM3
Ethernet
Device
LocalHost
SMTP
OK
Cancel

Localhost

☑ Overwrite IP

☐ Obtain an IP address automatically

HMI: HMI

HMI IP Address: 172 . 16 . 190 . 51

Subnet Mask: 255 . 255 . 255 . 0

Gateway IP: 0 . 0 . 0 . 0

upload/download port: 12346

Modbus TCP Server Port: 502

Application (eRemote/eServer)

☑ Enable

Password: 12345678

Scan Time: 100 (ms)

Port: 12348

☐ Comm. Interrupt 3 times then ignore

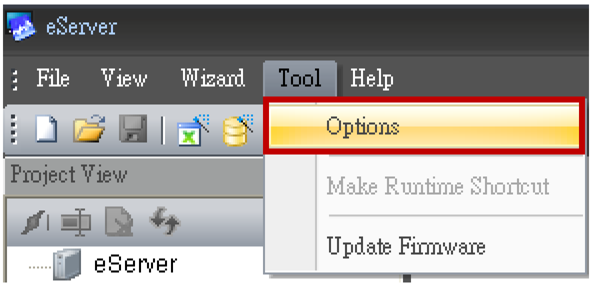
3.3 Start eServer

To start eServer, click **Start > Programs > Delta Industrial Automation > HMI > DOP eServer 1.00.0x > eServer**.

eServer
2012 Copyright. All rights reserved.Delta Electronics, Inc.
DELTA

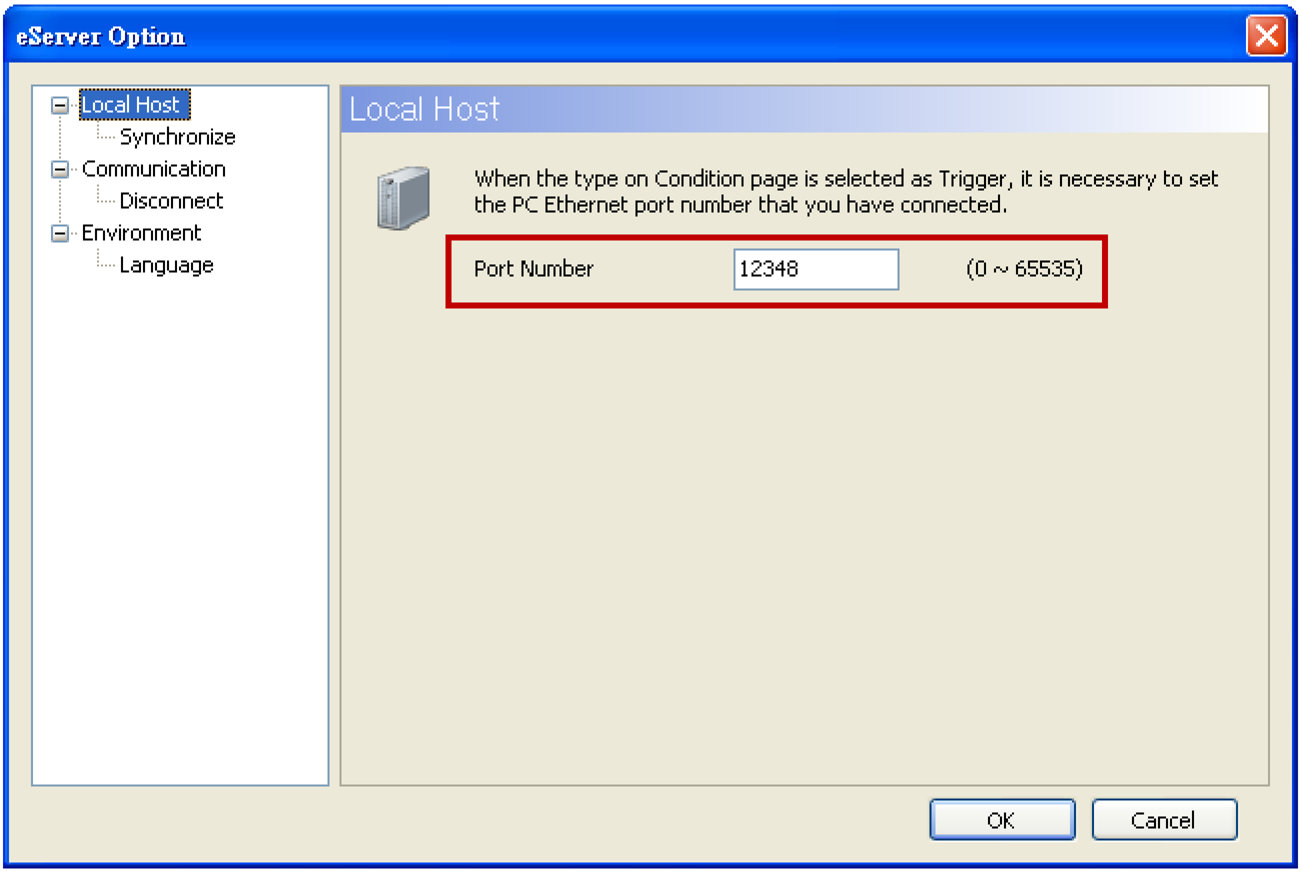
3.4 eServer Options

Start eServer and click **Tool > Options** to synchronize Time and Date settings and perform Disconnect function.


eServer
File
View
Wizard
Tool
Help
Options
Make Runtime Shortcut
Update Firmware
Project View
eServer

3.4.1 Local Host

When the type on Condition page is selected as Trigger, it is necessary to set the PC Ethernet port number that you have connected. The default setting is 12348.

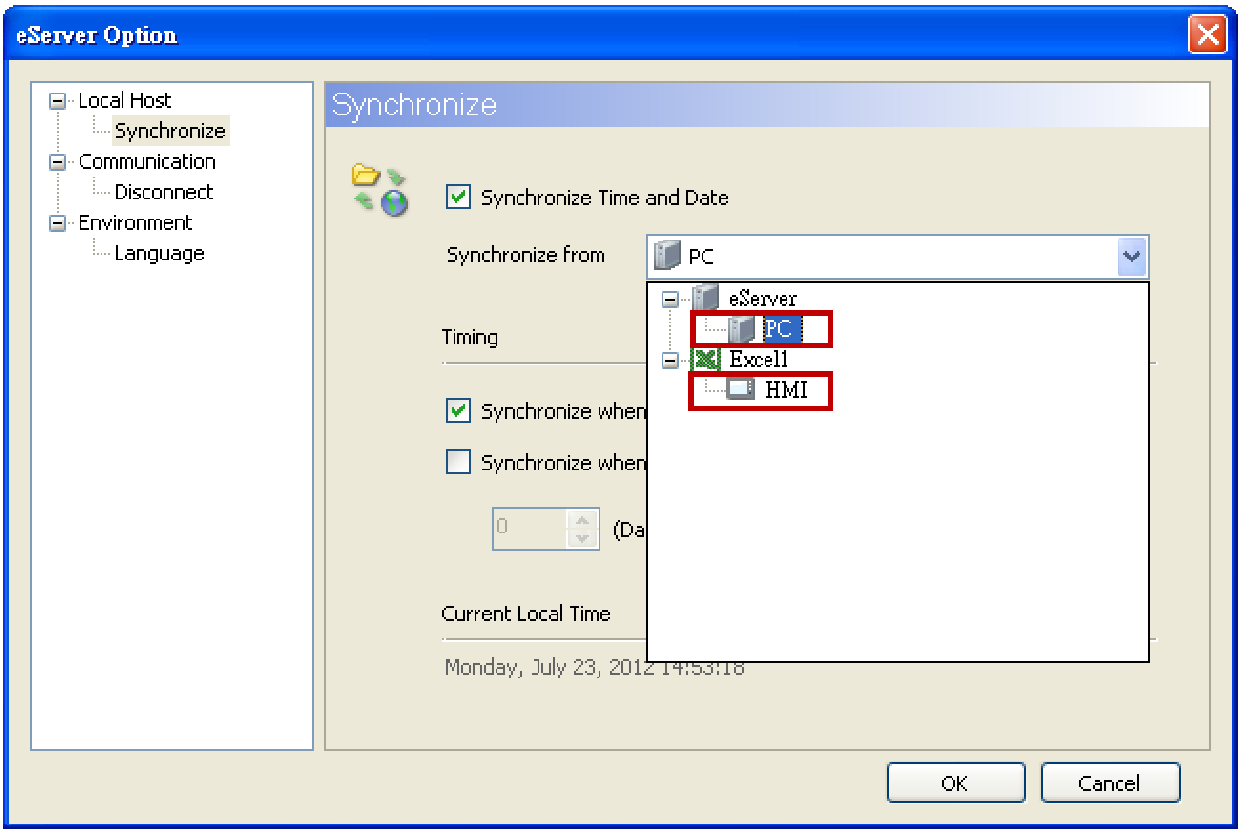

eServer Option
Local Host
Synchronize
Communication
Disconnect
Environment
Language
Local Host
OK
Cancel

When the type on Condition page is selected as Trigger, it is necessary to set the PC Ethernet port number that you have connected.

Port Number 12348 (0 ~ 65535)

3.4.2 Synchronize Function

Click **Tool > Options** to enter **eServer Option** dialog box. After the box before “Synchronize Time and Date” is checked, the Synchronize function is enabled and the users can choose the source of synchronization function shown as the figure below. When PC is selected, it indicates that the time and date of HMI are both synchronized with the PC. If a linkage (node) is selected, it indicated that the time and date of HMI and PC are all synchronized with the selected linkage.


eServer Option
Local Host
Synchronize
Communication
Disconnect
Environment
Language
Synchronize
eServer
PC
Excel1
HMI
Timing
(Da
Current Local Time
OK
Cancel

☑ Synchronize Time and Date

Synchronize from: PC

☑ Synchronize when

☐ Synchronize when

0

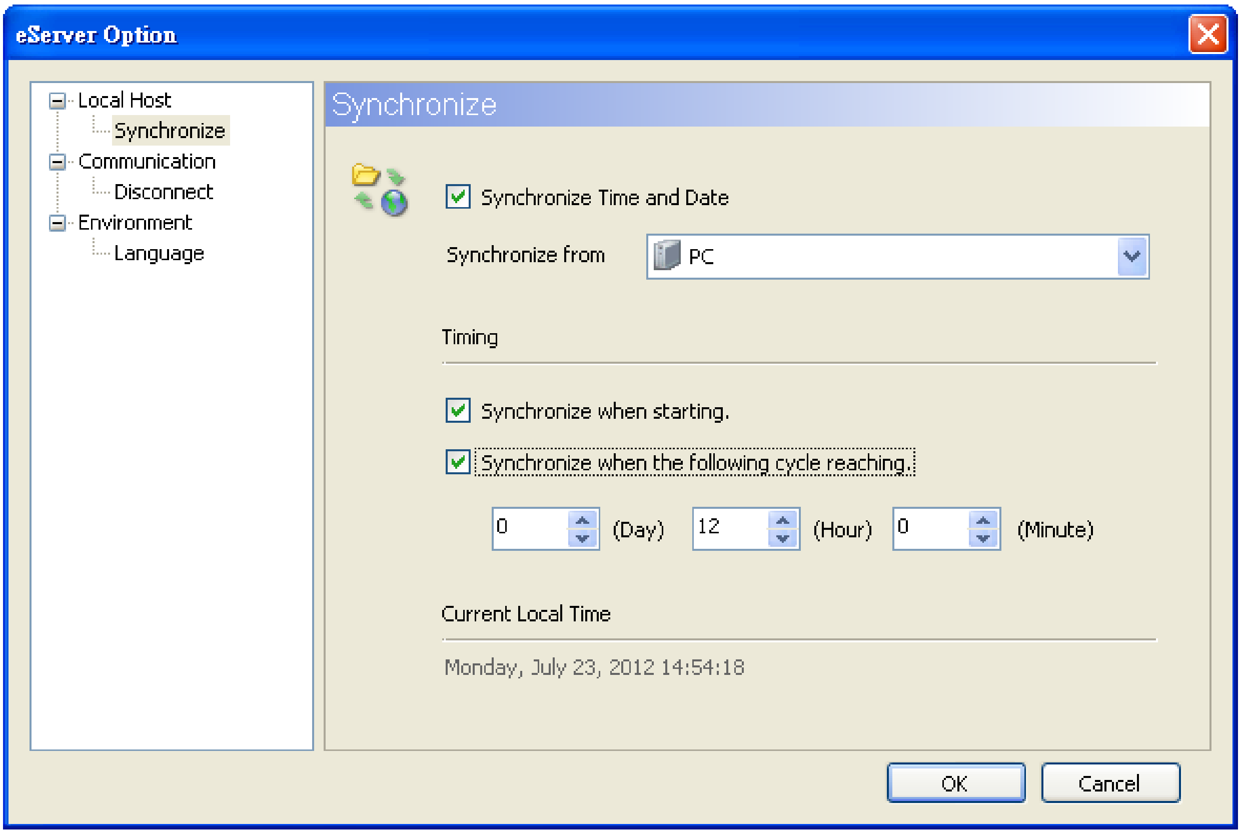
Monday, July 23, 2012 14:53:18

After enable “Synchronize” function, set the timing for synchronizing the time and date.

There are two selections for setting the timing:

one is “Synchronize when starting” and the other is “Synchronize when the following cycle reaching”. Please refer to the figure below.

If “Synchronize when starting” is selected, the time and date of HMI will be synchronized when eServer is started. If “Synchronize when the following cycle reaching” is selected and the cycle time is set to 12 hours, the time and date of HMI will be synchronized once every 12 hours.



eServer Option
Local Host
Synchronize
Communication
Disconnect
Environment
Language
Synchronize
OK
Cancel

☑ Synchronize Time and Date

Synchronize from: PC

Timing

☑ Synchronize when starting.

☑ Synchronize when the following cycle reaching.

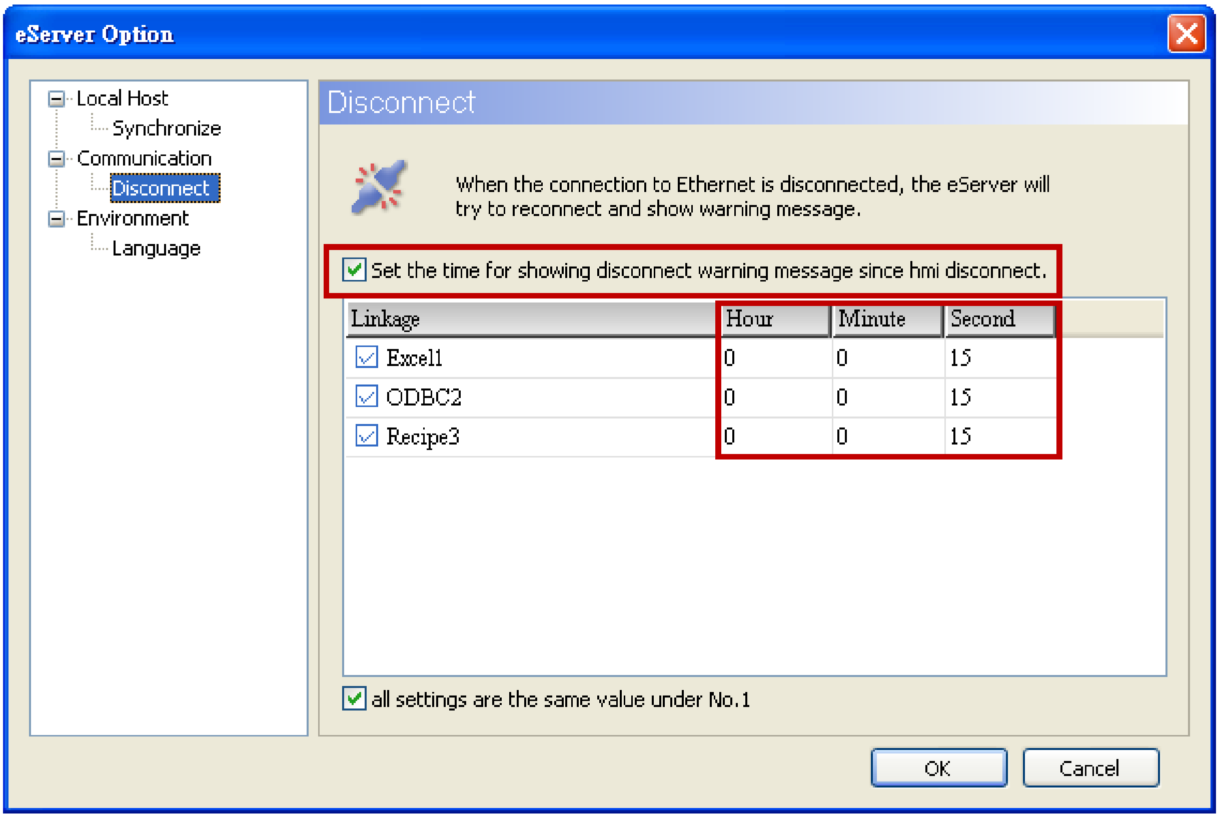
0 (Day) 12 (Hour) 0 (Minute)

Current Local Time

Monday, July 23, 2012 14:54:18

3.4.3 Disconnect Function

This function allows the system to display warning message when the HMI connection to Ethernet is disconnected, the eServer will showing the warning message after the configured time period.


eServer Option
Local Host
Synchronize
Communication
Disconnect
Environment
Language
Disconnect
OK
Cancel

When the connection to Ethernet is disconnected, the eServer will try to reconnect and show warning message.

☑ Set the time for showing disconnect warning message since hmi disconnect.

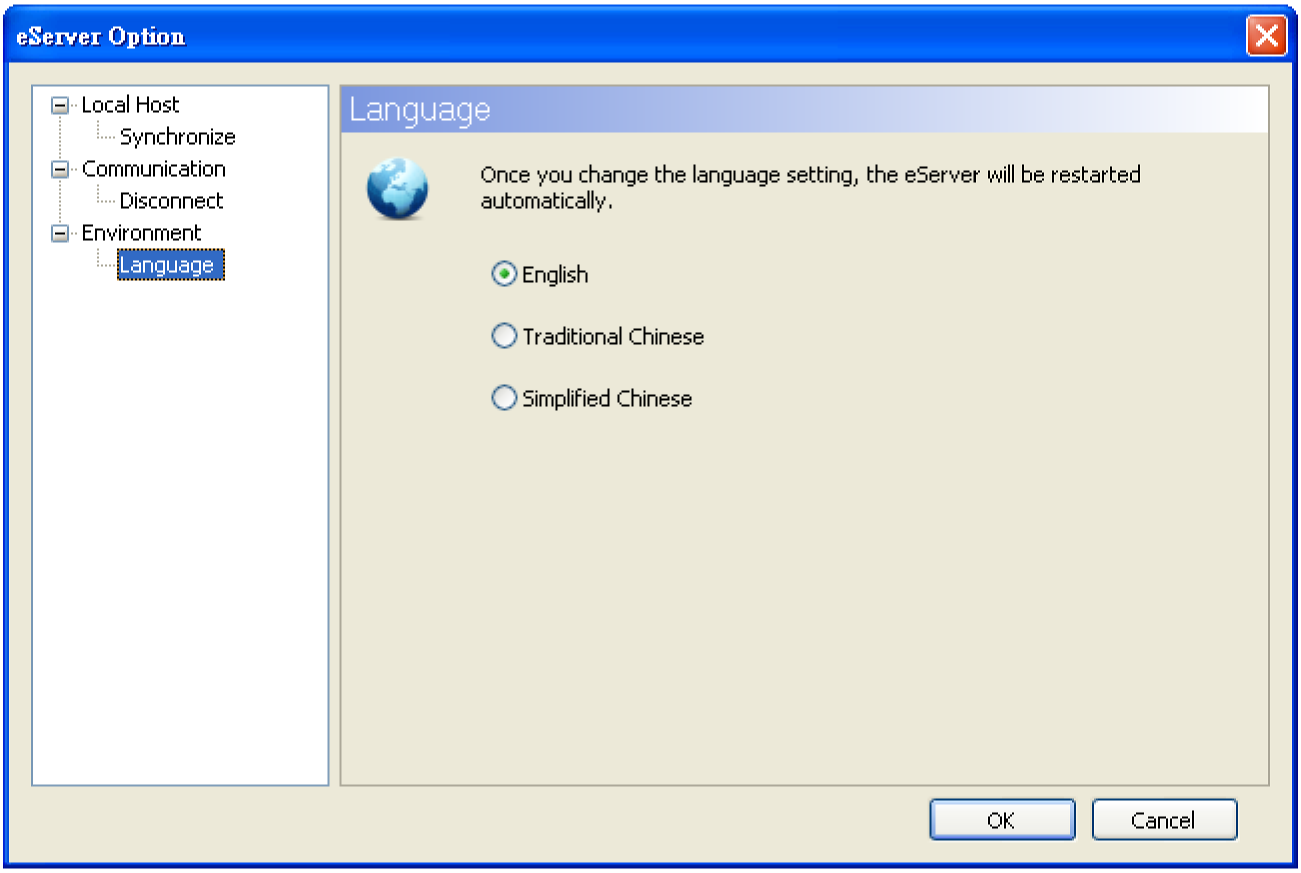
Linkage	Hour	Minute	Second
☑ Excel1	0	0	15
☑ ODBC2	0	0	15
☑ Recipe3	0	0	15

☑ all settings are the same value under No.1

For example, see the above figure, if the time is set to 15 seconds, when the connection to Ethernet is disconnected, the eServer will display warning message after 15 seconds.

3.4.4 Environment Language Setting

User could change eServer interface language; we provide English, Traditional Chinese and Simplified Chinese to select.


eServer Option
Local Host
Synchronize
Communication
Disconnect
Environment
Language
Language

Once you change the language setting, the eServer will be restarted automatically.

● English

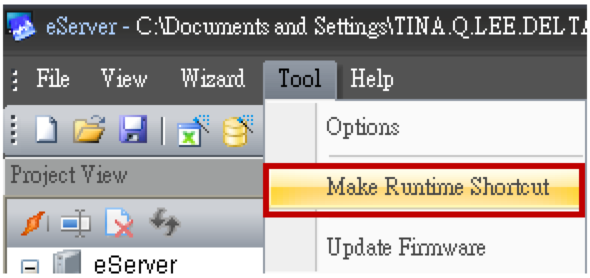
○ Traditional Chinese

○ Simplified Chinese

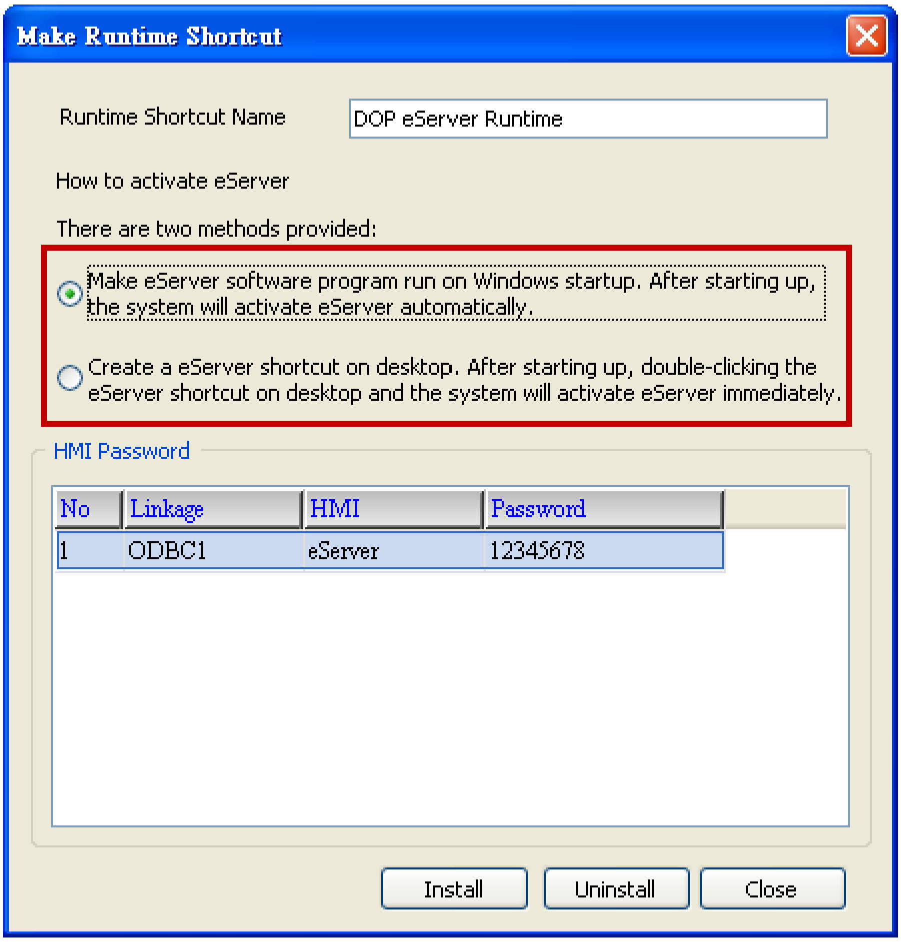
OK
Cancel

3.5 Make Runtime Shortcut

Start eServer and click **Tool > Make Runtime Shortcut** to create a eServer shortcut and activate eServer quickly.


eServer - C:\Documents and Settings\TINA.Q.LEE.DELT
File
View
Wizard
Tool
Help
Options
Make Runtime Shortcut
Update Firmware
Project View
eServer

There are two methods provided for making Runtime Shortcut. Please refer to the figure below.


Make Runtime Shortcut
Install
Uninstall
Close

Runtime Shortcut Name: DOP eServer Runtime

How to activate eServer

There are two methods provided:

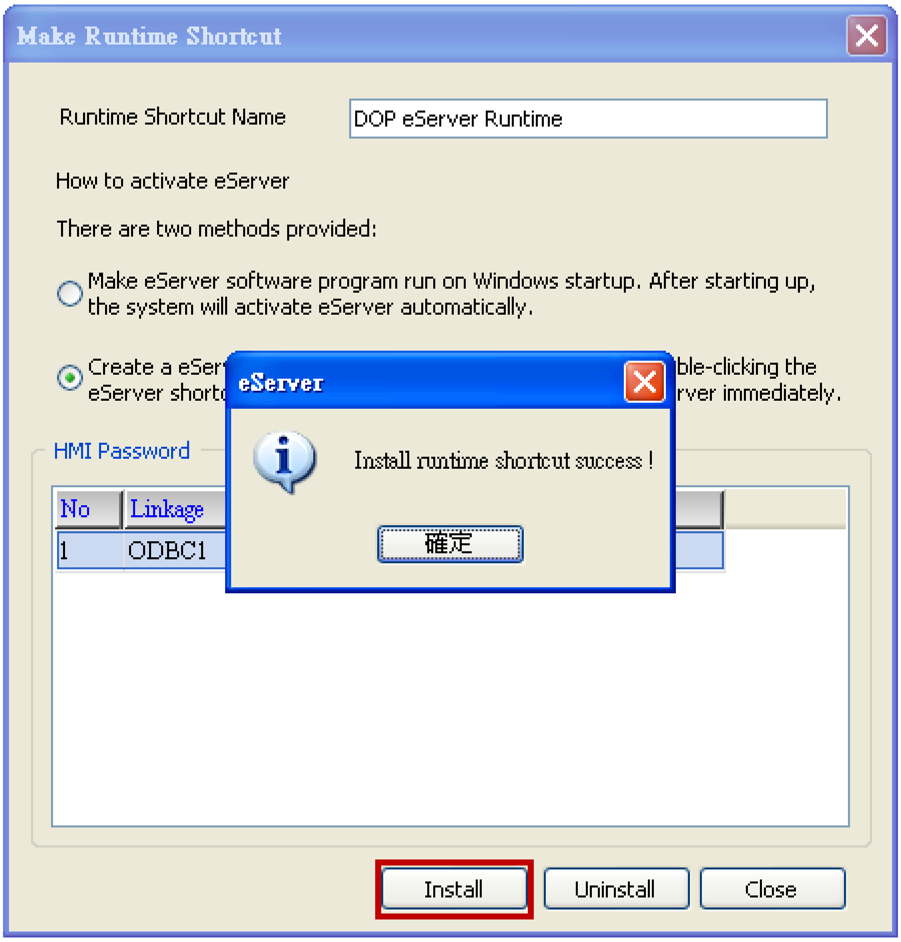
● Make eServer software program run on Windows startup. After starting up, the system will activate eServer automatically.

○ Create a eServer shortcut on desktop. After starting up, double-clicking the eServer shortcut on desktop and the system will activate eServer immediately.

HMI Password

No	Linkage	HMI	Password
1	ODBC1	eServer	12345678

When selecting the desired method, press **Install** button to finish the settings.



Runtime Shortcut Name: DOP eServer Runtime

How to activate eServer

There are two methods provided:

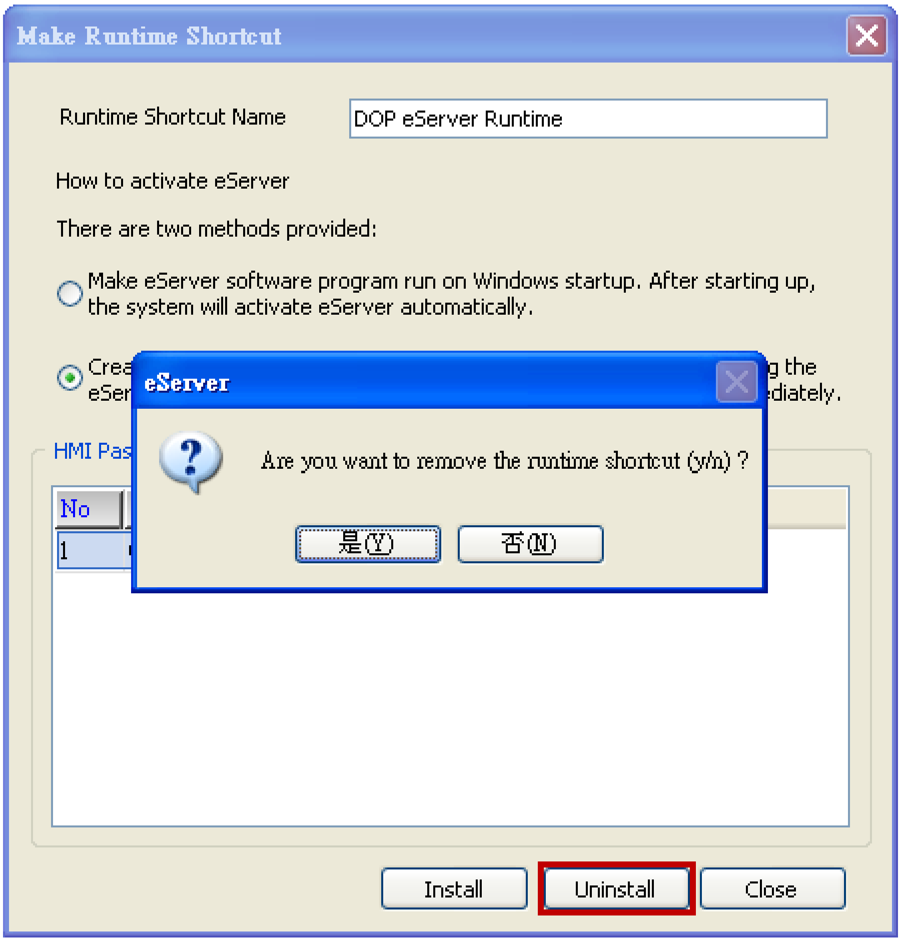
○ Make eServer software program run on Windows startup. After starting up, the system will activate eServer automatically.

● Create a eSer ble-clicking the
eServer shortc rver immediately.

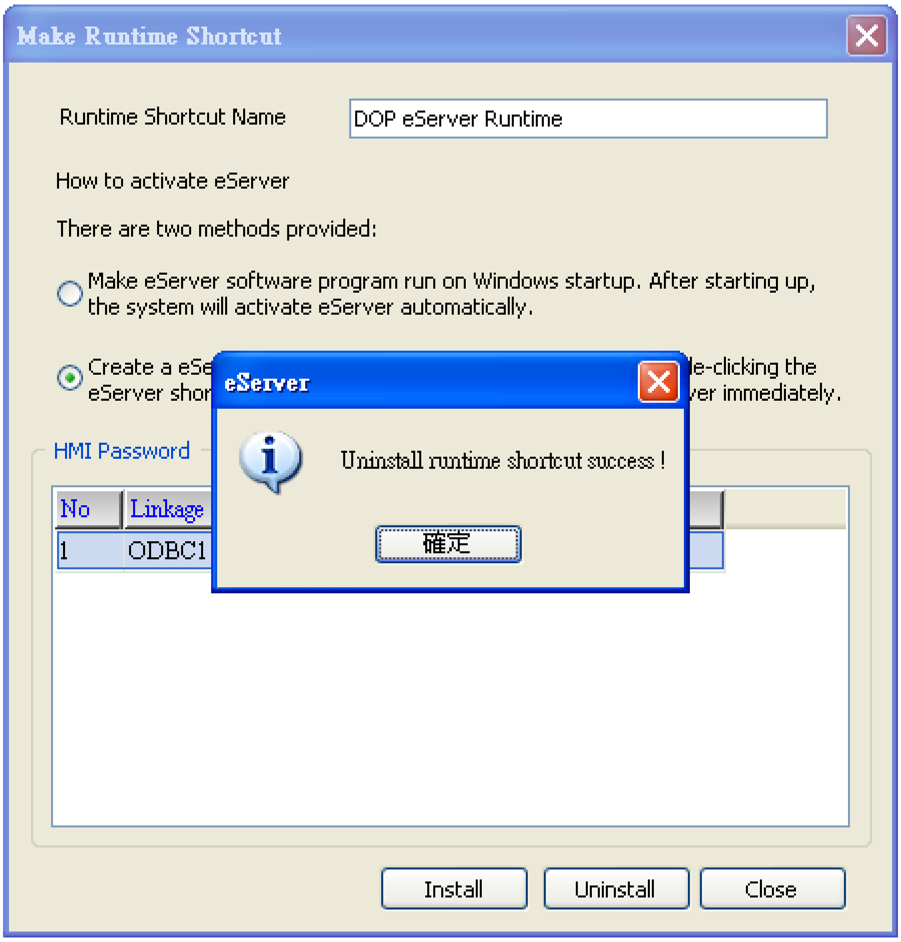
Install runtime shortcut success !

Make Runtime Shortcut
eServer
HMI Password
No
Linkage
1
ODBC1
確定
Install
Uninstall
Close

If the users want to delete the shortcut, please start eServer, click **Tool > Make Runtime Shortcut** and press **Uninstall** button to remove the shortcut. Failure to follow the above instruction to delete the shortcut will result in system error or abnormal operation.



Make Runtime Shortcut
Runtime Shortcut Name
DOP eServer Runtime
How to activate eServer
There are two methods provided:
○ Make eServer software program run on Windows startup. After starting up, the system will activate eServer automatically.
● Crea… eSer… …g the …diately.
HMI Pas…
No
1
eServer
Are you want to remove the runtime shortcut (y/n) ?
是(Y)
否(N)
Install
Uninstall
Close



Make Runtime Shortcut

Runtime Shortcut Name: DOP eServer Runtime

How to activate eServer

There are two methods provided:

○ Make eServer software program run on Windows startup. After starting up, the system will activate eServer automatically.

● Create a eSe… eServer shor… …le-clicking the …ver immediately.

HMI Password

No	Linkage
1	ODBC1

eServer

Uninstall runtime shortcut success !

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Chapter 4 Excel Sampling Setting

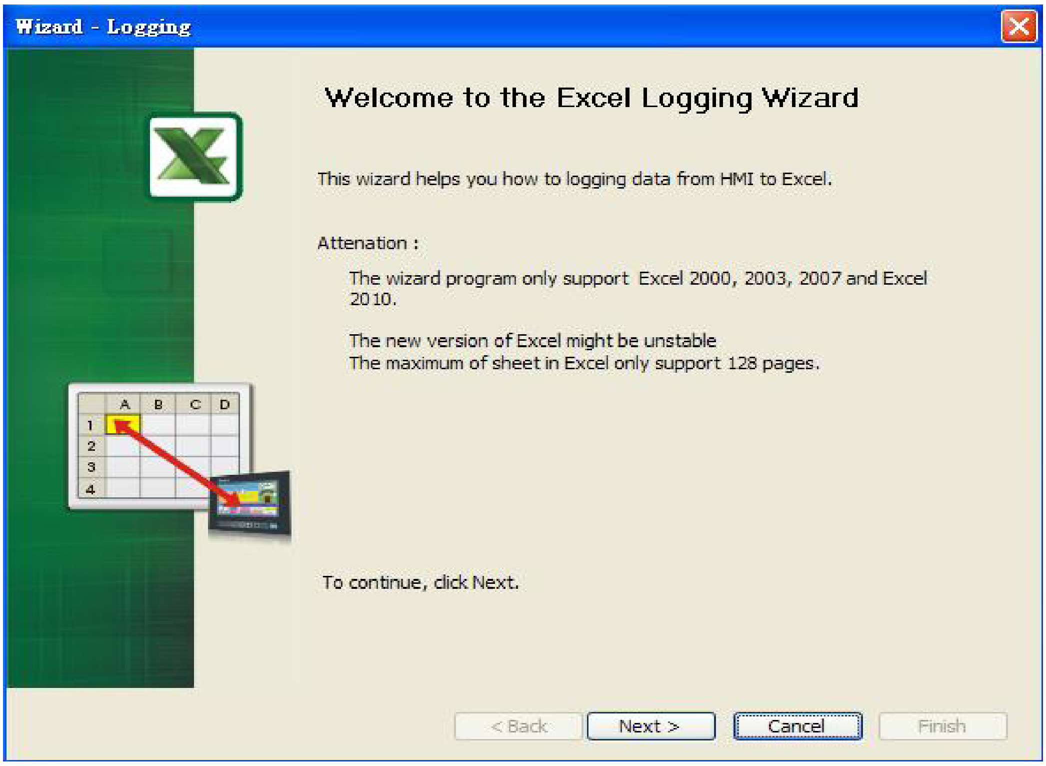
4.1 Detailed Settings

Please refer to the following steps to complete Excel sampling setting, i.e. how to log data from HMI to Excel.

4.1.1 Linkage

Start eServer, and click **File > New** or click **New** icon After the **New** dialog box is opened, select **Logging (Excel)** icon and press **OK** button.

Then, the **Excel Logging Wizard** will be activated and the following dialog box will appear. Press **Next** button to continue.



Welcome to the Excel Logging Wizard

This wizard helps you how to logging data from HMI to Excel.

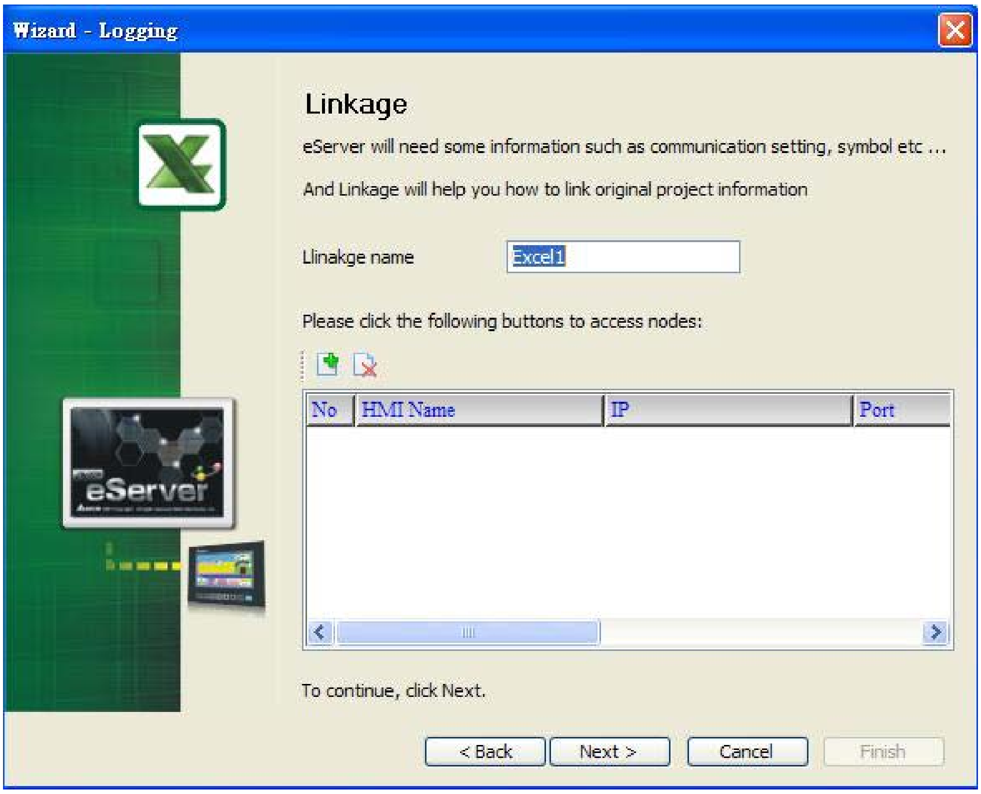
Attenation :

The wizard program only support Excel 2000, 2003, 2007 and Excel 2010.

The new version of Excel might be unstable
The maximum of sheet in Excel only support 128 pages.

To continue, click Next.

Click **New** icon to access nodes (link to HMI).



Wizard - Logging

Linkage

eServer will need some information such as communication setting, symbol etc ...

And Linkage will help you how to link original project information

Llinakge name: Excel1

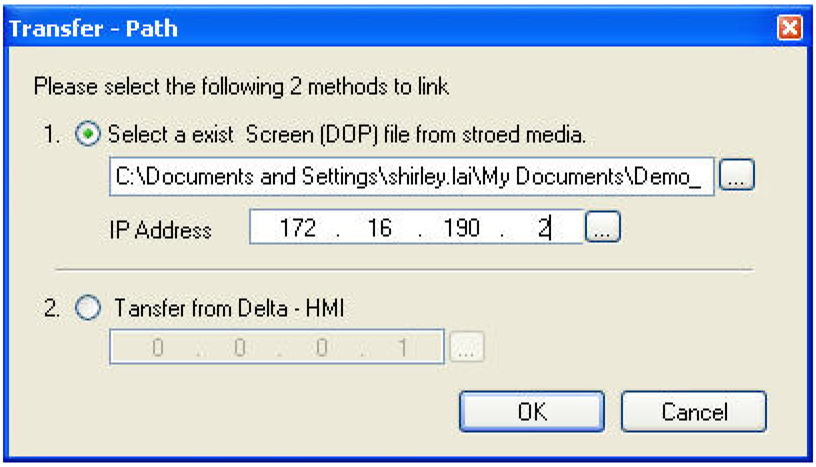
Please click the following buttons to access nodes:

No	HMI Name	IP	Port

To continue, click Next.

Click icon to link HMI screen project file. There are two methods available for selection:

1. Select an existing Screen (DOP) file from stored media: Open an existing screen project file and set the IP address of the connecting HMI.

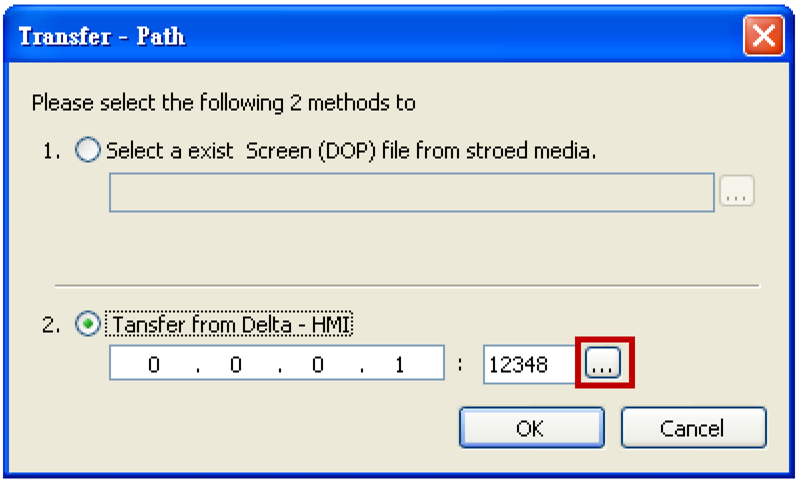


Transfer - Path

Please select the following 2 methods to link

1. ● Select a exist Screen (DOP) file from stroed media.
   C:\Documents and Settings\shirley.lai\My Documents\Demo_
   IP Address: 172 . 16 . 190 . 2
2. ○ Tansfer from Delta - HMI
   0 . 0 . 0 . 1

2. Transfer from Delta – HMI: Transfer the HMI screen project file via network communication directly.



Transfer - Path

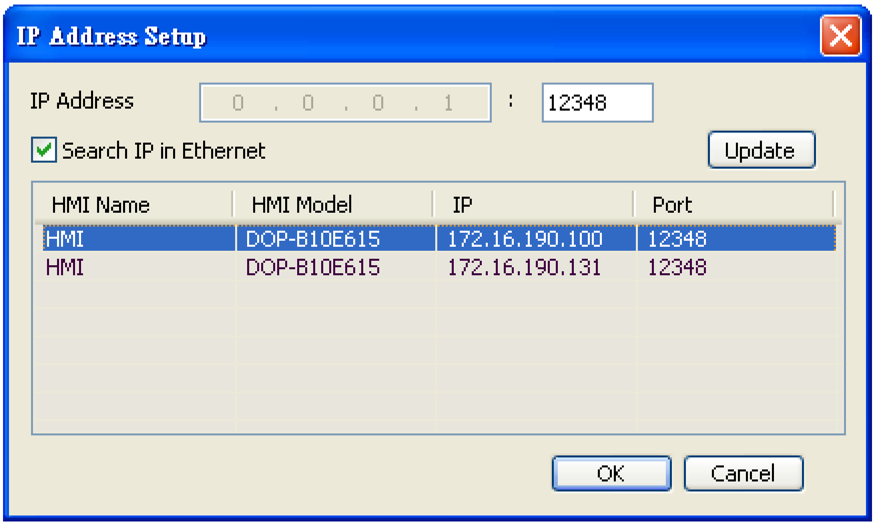
Please select the following 2 methods to

1. ○ Select a exist Screen (DOP) file from stroed media.

2. ● Tansfer from Delta - HMI

0 . 0 . 0 . 1 : 12348

After searching finished, press select wanted HMI then press **OK** button.



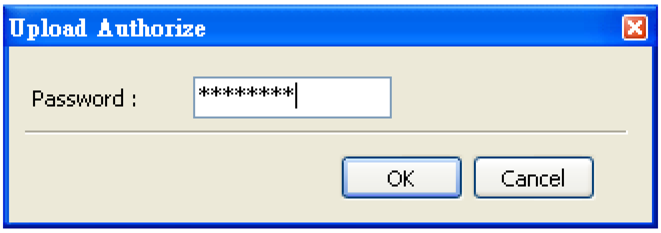
IP Address Setup

IP Address 0 . 0 . 0 . 1 : 12348

☑ Search IP in Ethernet

HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348
HMI	DOP-B10E615	172.16.190.131	12348

eServer will ask user to input authorize password to upload HMI project. The default security password is **12345678**. After input password finished, press **OK**.



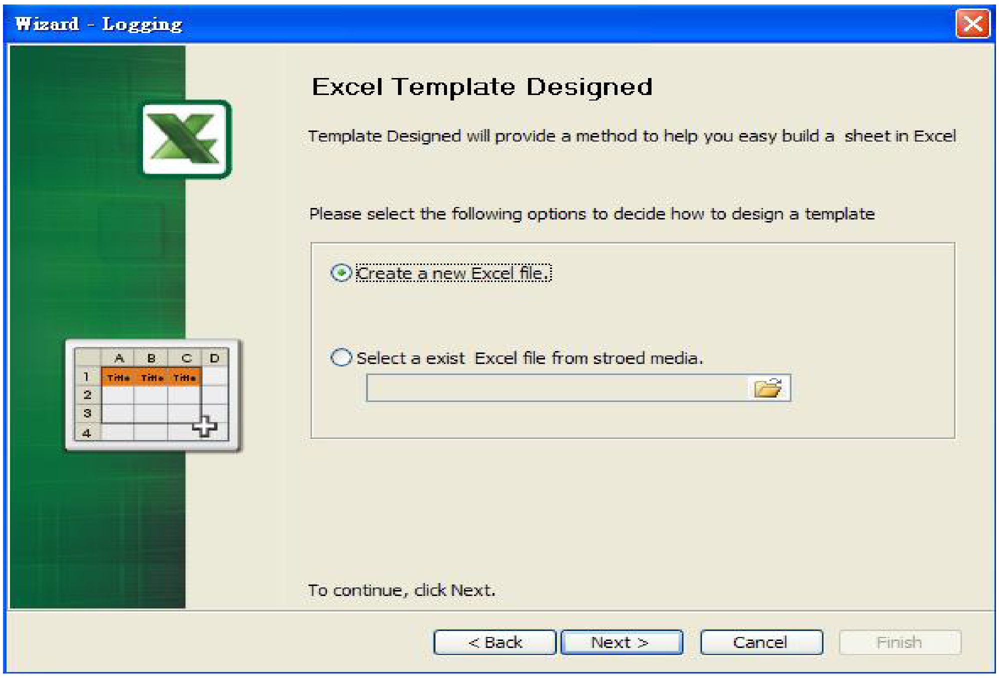
Upload Authorize

Password : ********

4.1.2 Excel Template Sheet Design

This step is used to create the desired Excel template sheet. There are two methods available for selection:

1. Create a new Excel file: When this option is selected, the system will activate Excel automatically and allow the users to design the desired Excel template sheet.
2. Select an existing Excel file from stored media: When this option is selected, the system will allow the users to open an existing Excel file.



Excel Template Designed

Template Designed will provide a method to help you easy build a sheet in Excel

Please select the following options to decide how to design a template

◉ Create a new Excel file.

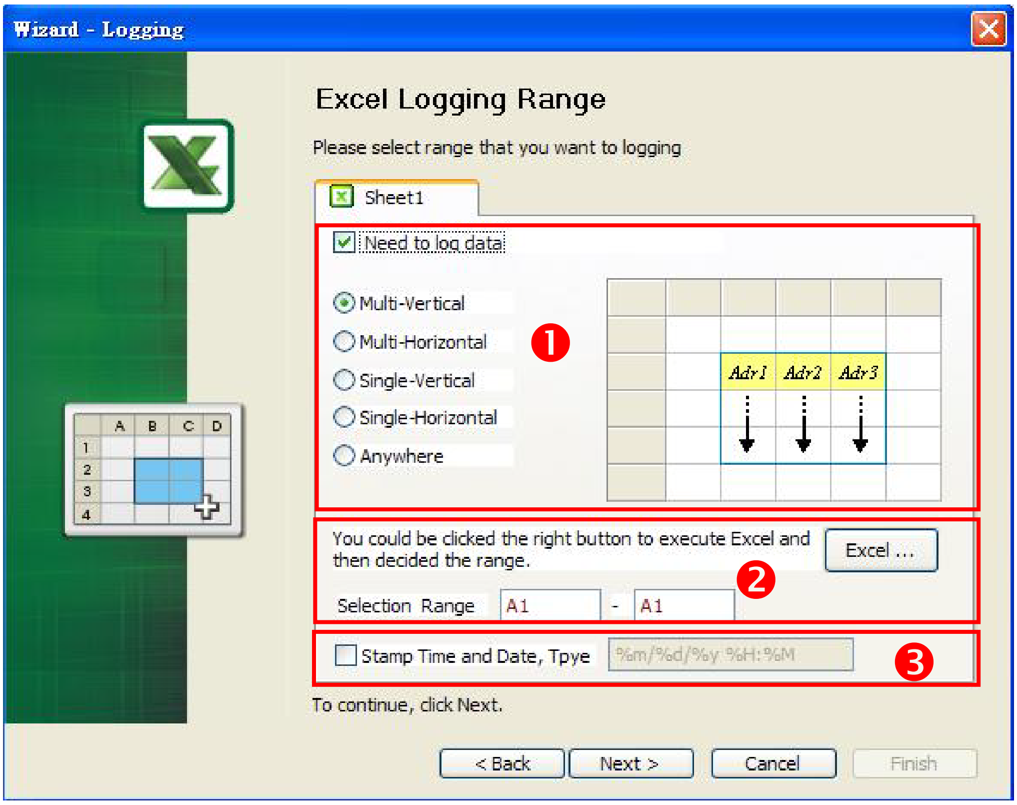
○ Select a exist Excel file from stroed media.

To continue, click Next.

Press **Next** button to go to next step.

4.1.3 Excel Logging Range Setting

This step is used to specify the logging range to which the sampling data will be written. There are three parts in this dialog box.



Wizard - Logging

Excel Logging Range

Please select range that you want to logging

☑ Need to log data

● Multi-Vertical
○ Multi-Horizontal
○ Single-Vertical
○ Single-Horizontal
○ Anywhere

You could be clicked the right button to execute Excel and then decided the range.

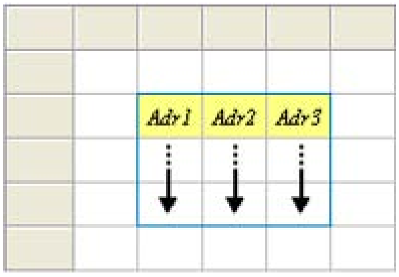
Selection Range A1 - A1

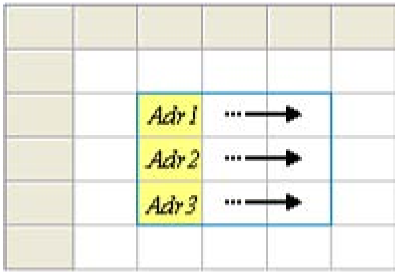
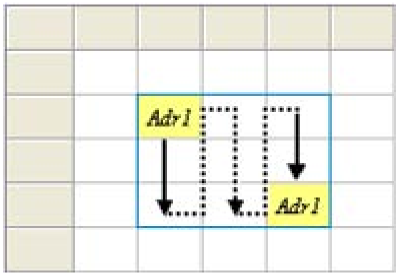
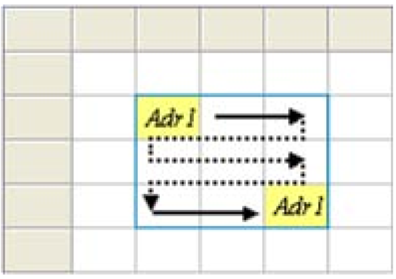
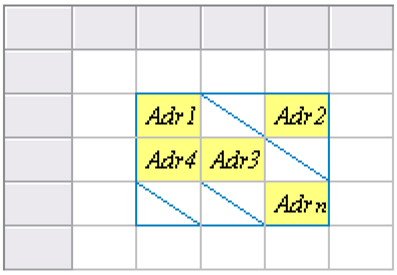
☐ Stamp Time and Date, Tpye %m/%d/%y %H:%M

To continue, click Next.

1. Sampling Direction

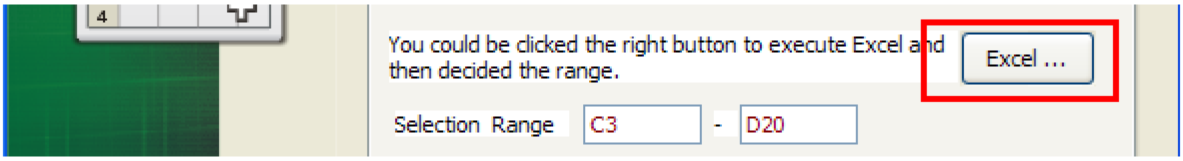
Check **Need to log data** box to determine the sampling direction and select the data range that you want to log. If **Need to log data** box is not checked, the sampling direction will be disabled and the data range cannot be selected. There are five different sampling directions could be selected. Please refer to the following table for explanation.

Sampling Direction	Diagram
Multi-Vertical: When this option is selected, multiple numbers of different register data could be logged into each vertical column in the selecting area simultaneously.	

Sampling Direction	Diagram
Multi-Horizontal: When this option is selected, multiple numbers of different register data could be logged into each horizontal row in the selecting area simultaneously.	
Single-Vertical: When this option is selected, only one number of register data could be logged into one cell for one time. The sampling operation is in vertical direction. The sampling operation of the second vertical column will not start unless the sampling operation of the first vertical column is done. Please refer to the right diagram.	
Single-Horizontal: When this option is selected, only one number of register data could be logged into one cell for one time. The sampling operation is in horizontal direction. The sampling operation of the second horizontal row will not start unless the sampling operation of the first horizontal row is done. Please refer to the right diagram.	
Anywhere: When this option is selected, the register data could be logged into any desired cell.	

2. Selection Range

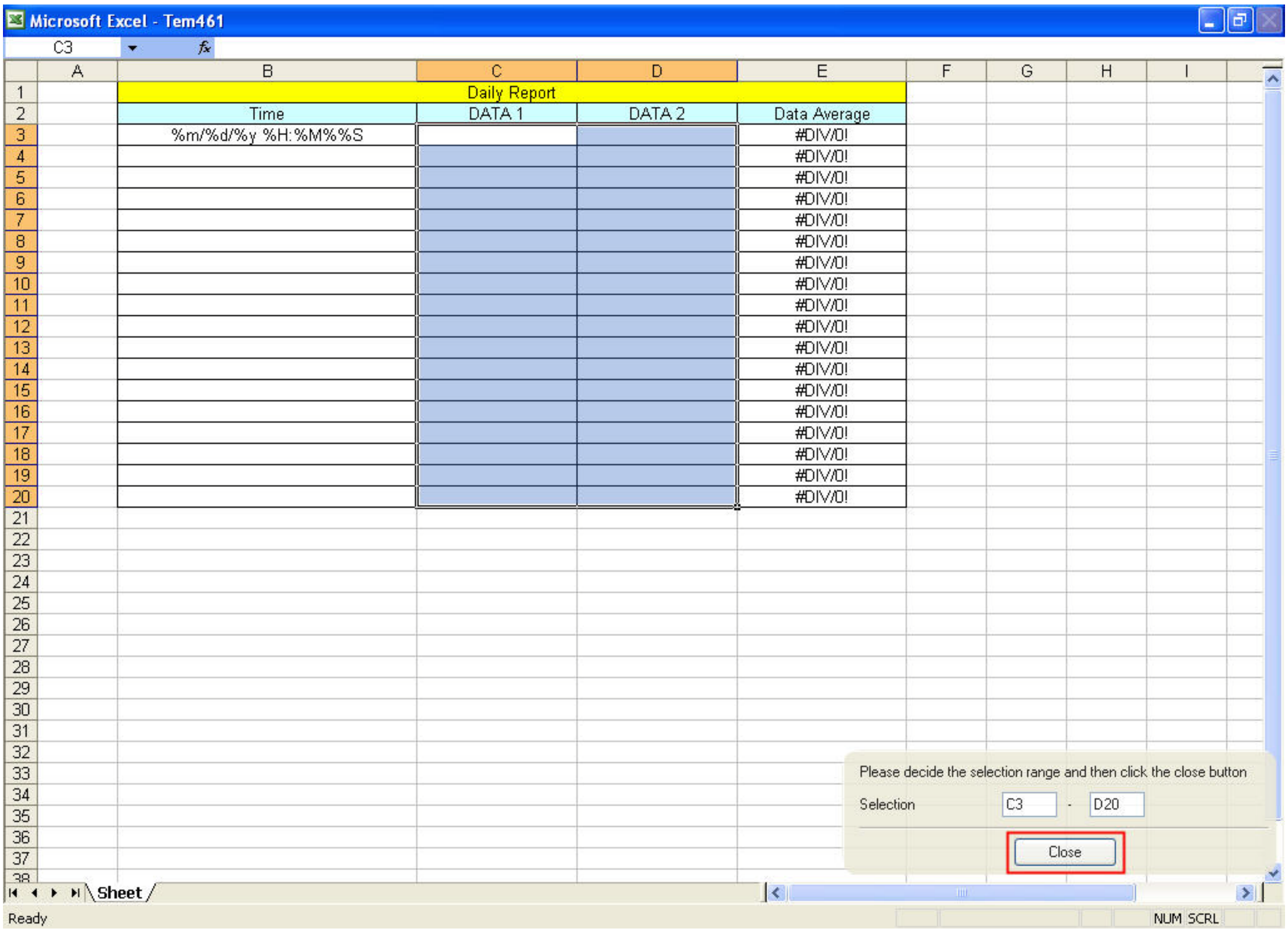
Press Excel button and the system will open the editing Excel template sheet immediately.



You could be clicked the right button to execute Excel and then decided the range.

Selection Range C3 - D20

In Excel template sheet, use the mouse to decide the selection range. After the desired range is selected, press **Close** button to finish.



Daily Report

Time	DATA 1	DATA 2	Data Average
%m/%d/%y %H:%M%%S			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!

Please decide the selection range and then click the close button

Selection C3 - D20

3. Stamp Time and Date

When this option is selected, the sampling time and date will be written as well automatically when the sampling data is recorded. The written position will be different depending on the setting sampling direction. Generally, the written position will be at the previous column or row before the selection range. However, if the following three conditions occur, the function of Stamp Time and Date will be disabled.

a. When the sampling direction is vertical and the selection range includes column A (the first column).

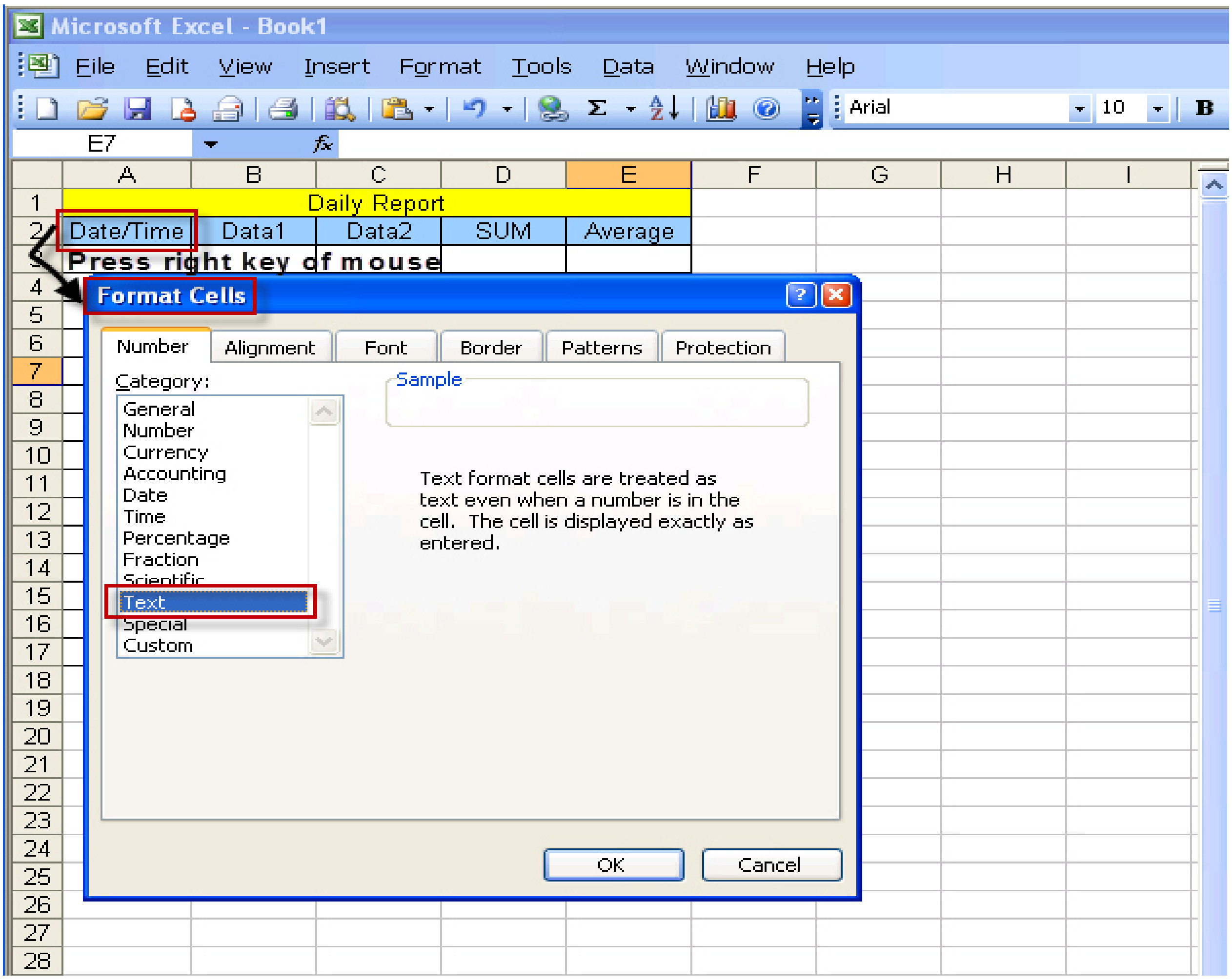
b. When the sampling direction is horizontal and the selection range includes row 1 (the first row).

c. When the sampling direction is anywhere.

The format of the date and time is specified by a string of characters which can be user-defined and changed freely. Please refer to the table below for the string representation.

String Format	Representation
%m	Month
%d	Date
%y	Year
%H	Hour
%M	Minute
%S	Second

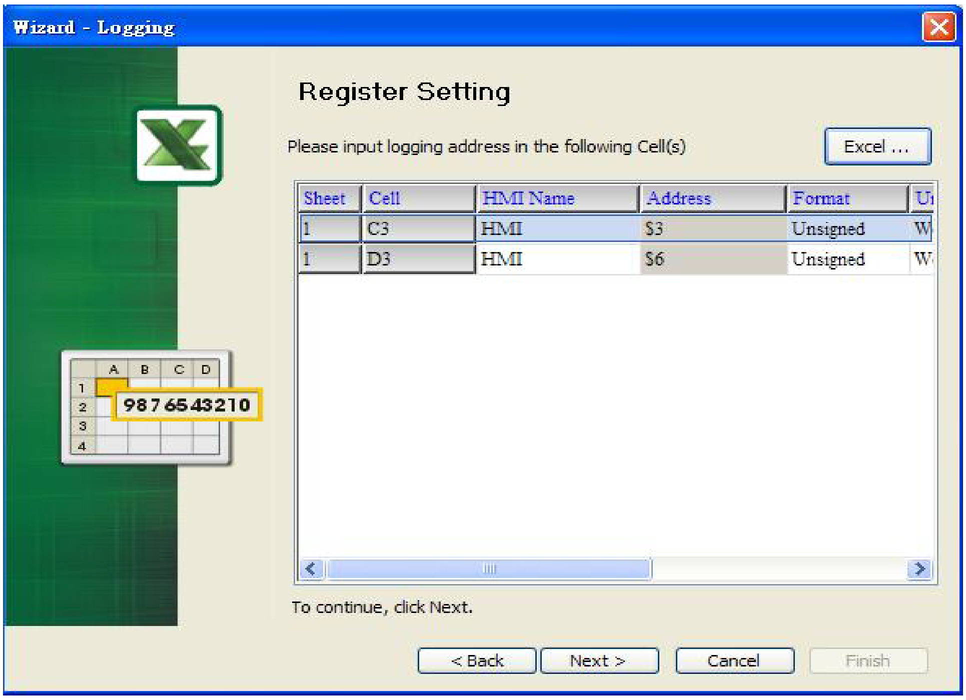
When change time stamp to "%m/%d %H:%M:%S", Excel will automatically transfer General type to Text type of Format Cells. Therefore, if set the value to 03/09 12:58:36, it will corresponding to 2011/3/9 12:58:36. If you would like to use the custom format in Excel, please set the time stamp column, and press right key of mouse, into Format Cells to change the General type to Text type.


Microsoft Excel - Book1
File Edit View Insert Format Tools Data Window Help
Arial 10 B
E7
A B C D E F G H I
Daily Report
Date/Time Data1 Data2 SUM Average
Press right key of mouse
Format Cells
Number Alignment Font Border Patterns Protection
Category:
General
Number
Currency
Accounting
Date
Time
Percentage
Fraction
Scientific
Text
Special
Custom
Sample
OK
Cancel

Text format cells are treated as text even when a number is in the cell. The cell is displayed exactly as entered.

4.1.4 Register Setting

This step is used to set the register address of the sampling data.



Register Setting

Please input logging address in the following Cell(s)

Sheet	Cell	HMI Name	Address	Format	U
1	C3	HMI	$3	Unsigned	W
1	D3	HMI	$6	Unsigned	W

To continue, click Next.

Setting Item	Description	Remark
Sheet	Excel Sheet index which the sampling data will be written	Unchangeable
Cell	Excel Cell which the sampling data will be written	Unchangeable
HMI Name	Name of connecting HMI	
Address	Register Address	
Format	1. When the register address is set to Bit, this data format setting will be disabled. 2. When the register address is set to Word, this data format setting will be enabled and the available settings include: BCD, Signed, Unsigned, Hex, Floating, Char (Character)	
Unit	Unit of the data length of the register	Unchangeable
Read Count	1. When the register address is set to Bit, this setting will be 1(one) always. 2. When the register address is set to Word, if the data format is set to BCD, Signed, Unsigned, Hex, and Floating, the setting value of this field could not exceed 2(two). 3. When the register address is set to Word, if the data format is set to Char (Character), the setting value of this field could be user-defined and the max. setting value could be set to 100(hundred).	

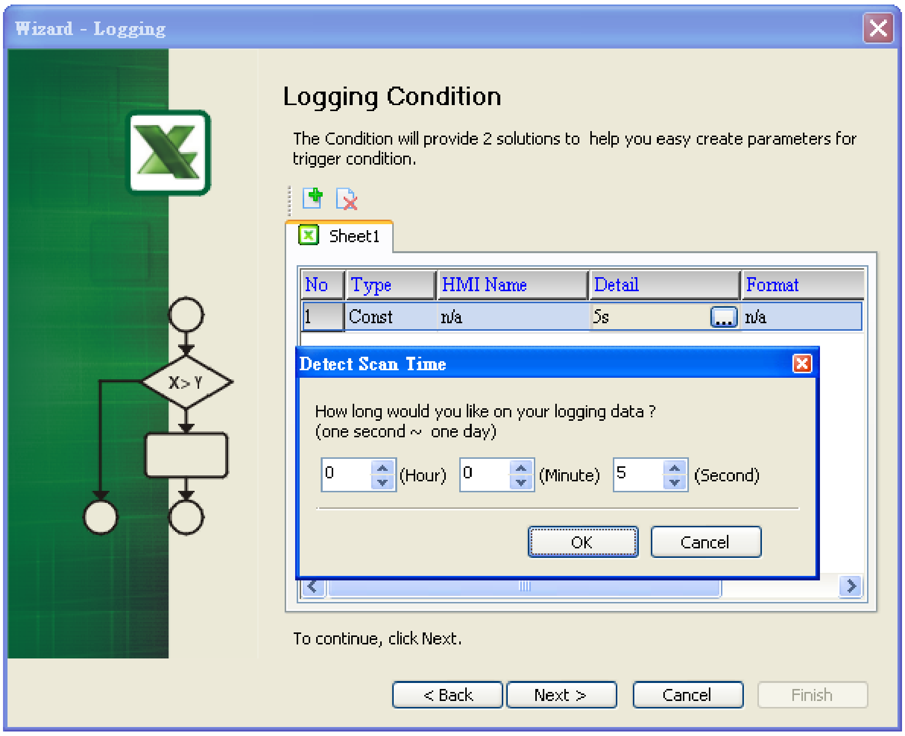
Setting Item	Description	Remark
Integer	1. If the register address is set to Bit, this integer setting cannot be set. 2. If the register address is set to Word, except Floating and Char(Character), when the other format is selected, this integer setting can be set. 3. When Read Count is 2, Format is floating, it can be set Integer.	
Fraction	1. If the register address is set to Bit, this fraction setting cannot be set. 2. If the register address is set to Word, except Floating and Char(Character), when the other format is selected, this fraction setting can be set. 3. When Read Count is 2, Format is floating, it can be set Fraction.	
Controller	Connecting controller	Unchangeable

4.1.5 Sampling Conditions

This step is used to set the sampling conditions. There are two kinds of options for selection:

1. Const (execute sampling repeatedly in a certain span of time)

   This option is used to determine how long the sampling process is repeated. The time unit can be defined as ms, second, minute or hour.



Logging Condition

The Condition will provide 2 solutions to help you easy create parameters for trigger condition.

No	Type	HMI Name	Detail	Format
1	Const	n/a	5s	n/a

Detect Scan Time

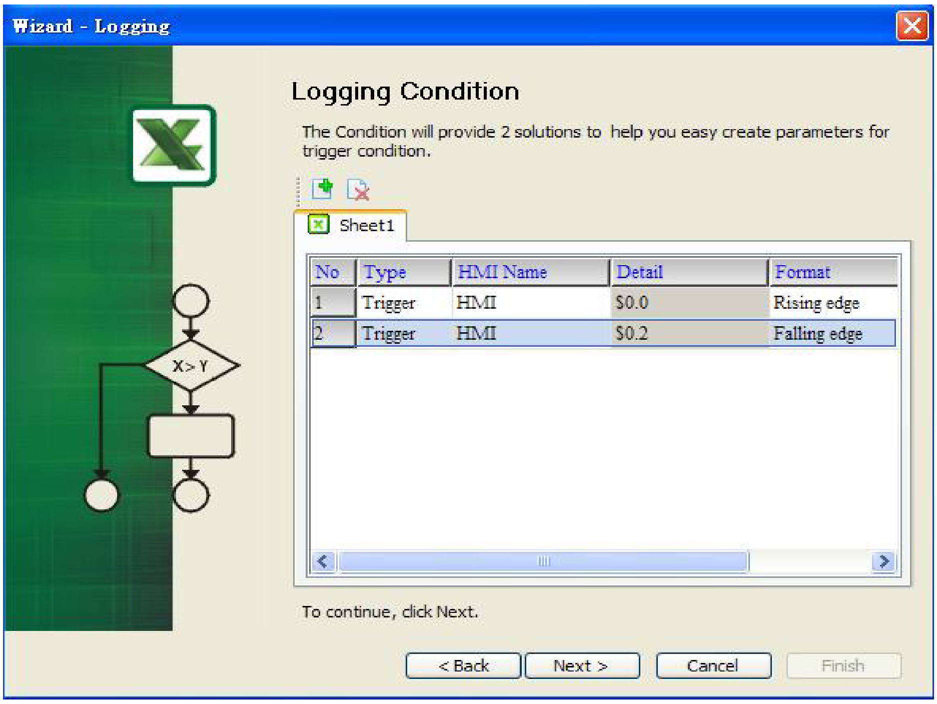
How long would you like on your logging data ?
(one second ~ one day)

0 (Hour) 0 (Minute) 5 (Second)

To continue, click Next.

2. Trigger (Execute sampling when the trigger conditions are satisfied)

   This option is used to determine how long the sampling process is repeated when the trigger conditions are met. The detailed settings are described as follows:



Logging Condition

The Condition will provide 2 solutions to help you easy create parameters for trigger condition.

Sheet1

No	Type	HMI Name	Detail	Format
1	Trigger	HMI	$0.0	Rising edge
2	Trigger	HMI	$0.2	Falling edge

To continue, click Next.

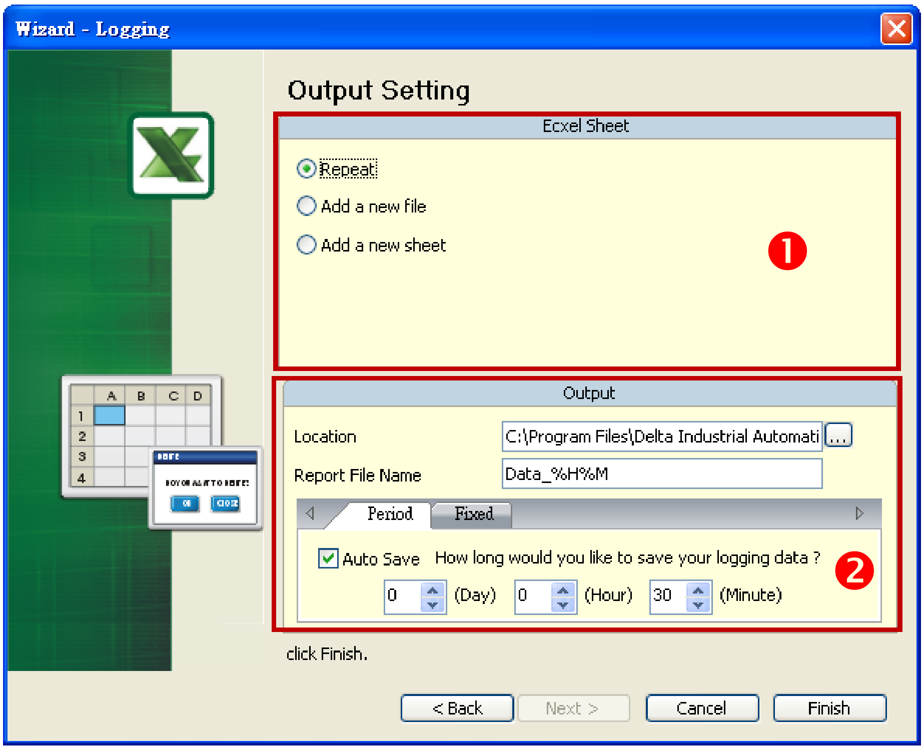
Polling Cycle (Sampling Cycle): It is used to determine how long the sampling process is repeated. The time unit is ms.

Logging Condition:

Setting Item	Description	Remark
No.	Condition number	Unchangeable
Type	Sampling type. There are two kinds of options for selection: Const and Trigger. Const: Execute sampling repeatedly in a certain span of time. Trigger: Execute sampling when the trigger conditions are satisfied.	
HMI Name	Name of connecting HMI	
Detail	Register Address	
Format	1. When the register address is set to Bit, the selectable options are: A. Rising edge: Triggered by rising-edge B. Falling edge Triggered by falling-edge	
Controller	Connecting controller	Unchangeable

4.1.6 Output Setting

This step is used to set how to output and save the sampling data.



Output Setting

Ecxel Sheet

● Repeat
○ Add a new file
○ Add a new sheet

Output

Location: C:\Program Files\Delta Industrial Automati

Report File Name: Data_%H%M

Period | Fixed

☑ Auto Save How long would you like to save your logging data ?

0 (Day) 0 (Hour) 30 (Minute)

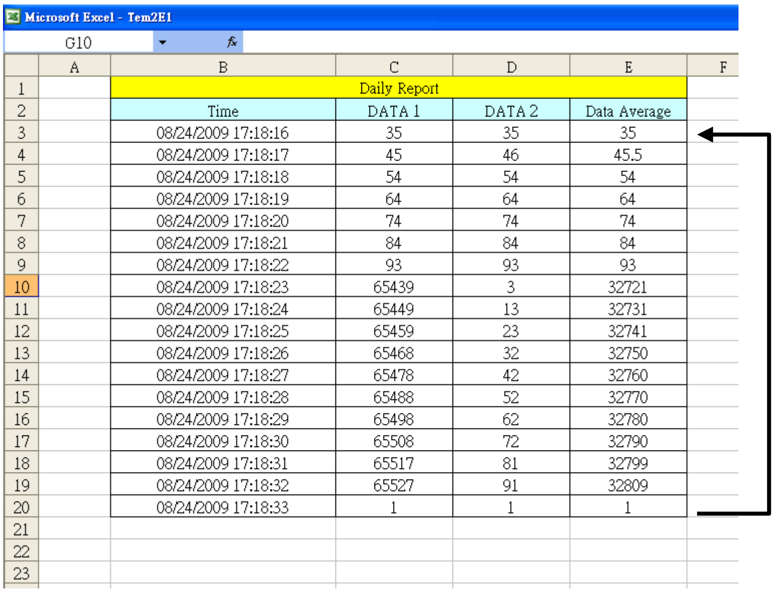
click Finish.

There are two parts in this dialog box:

1. Excel Sheet

   A. Repeat

      When the sampling data has been filled in the selection range to the full, the system will write the data into the selection range from the first column or row repeatedly.



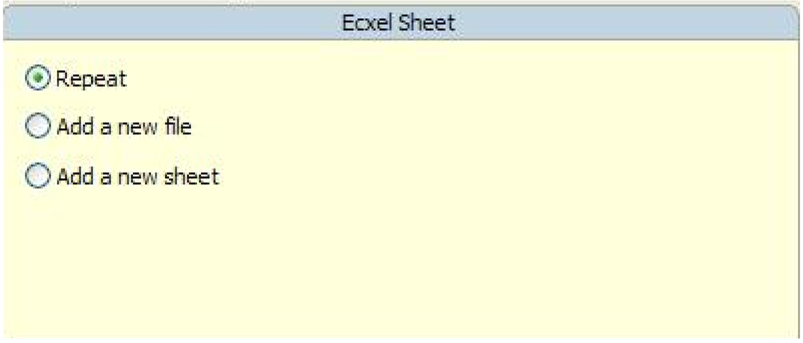
	A	B	C	D	E	F
1		Daily Report				
2		Time	DATA 1	DATA 2	Data Average	
3		08/24/2009 17:18:16	35	35	35	
4		08/24/2009 17:18:17	45	46	45.5	
5		08/24/2009 17:18:18	54	54	54	
6		08/24/2009 17:18:19	64	64	64	
7		08/24/2009 17:18:20	74	74	74	
8		08/24/2009 17:18:21	84	84	84	
9		08/24/2009 17:18:22	93	93	93	
10		08/24/2009 17:18:23	65439	3	32721	
11		08/24/2009 17:18:24	65449	13	32731	
12		08/24/2009 17:18:25	65459	23	32741	
13		08/24/2009 17:18:26	65468	32	32750	
14		08/24/2009 17:18:27	65478	42	32760	
15		08/24/2009 17:18:28	65488	52	32770	
16		08/24/2009 17:18:29	65498	62	32780	
17		08/24/2009 17:18:30	65508	72	32790	
18		08/24/2009 17:18:31	65517	81	32799	
19		08/24/2009 17:18:32	65527	91	32809	
20		08/24/2009 17:18:33	1	1	1	
21						
22						
23						

   B. Add a new file

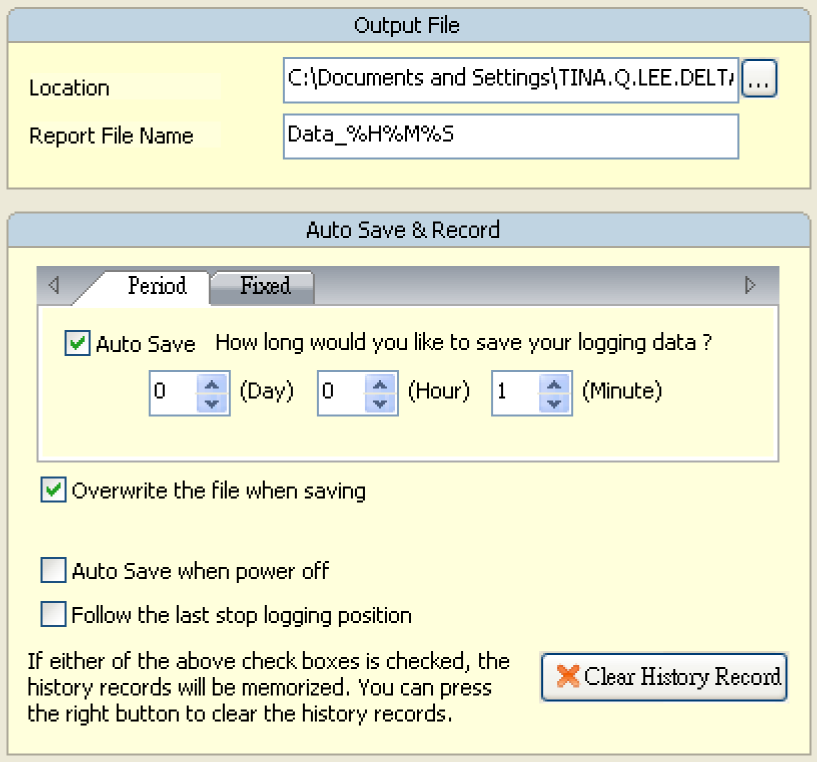
      When the sampling data has been filled in the selection range to the full, the system will open a new Excel file automatically and write the data into the new Excel file.

C. Add a new sheet

When the sampling data has been filled in the selection range to the full, the system will open a new Excel sheet automatically and write the data into the new Excel sheet.



2. Output Setting



Location: C:\Documents and Settings\TINA.Q.LEE.DELT/

Report File Name: Data_%H%M%S

☑ Auto Save How long would you like to save your logging data ?

0 (Day) 0 (Hour) 1 (Minute)

☑ Overwrite the file when saving

☐ Auto Save when power off

☐ Follow the last stop logging position

If either of the above check boxes is checked, the history records will be memorized. You can press the right button to clear the history records.

A. Location: Choose file destination location.

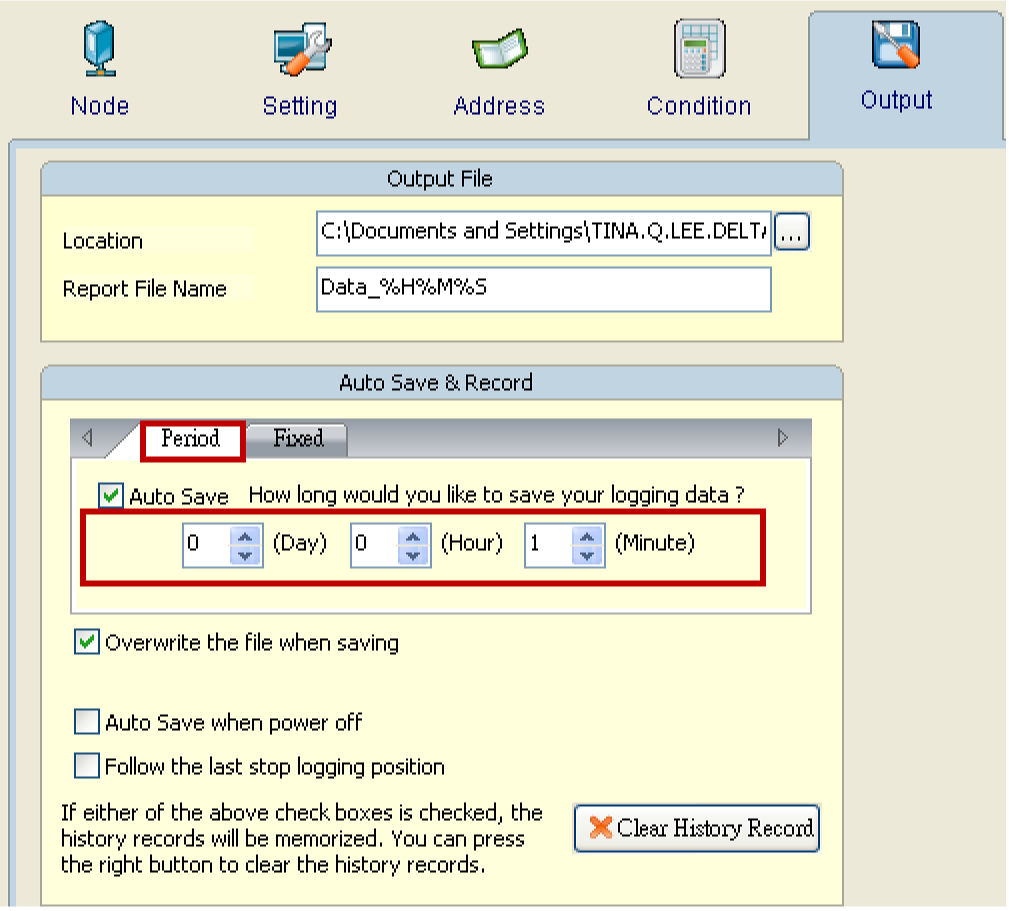
B. Report File Name: Specify the name of the report file. The users can add the date and time in the end of the file name. The format of the date and time is specified by a string of characters which can be user-defined and changed freely. Please refer to the table below for the string representation.

String Format	Representation
%m	Month
%d	Date

%y	Year
%H	Hour
%M	Minute
%S	Second

C. Auto Save: When this option is enabled, the system will back up the data in a period of specified time automatically in case the data will be lost due to abnormal operation when the power source is cut off unexpectedly or other accident occurs. Auto save function include **Period** and **Fixed**.

Period is corresponding to user custom time, if period time set to one minute, it means every minute save file and refer to Excel sheet to repeat, add a new file or add a new sheet.



Location C:\Documents and Settings\TINA.Q.LEE.DELT/

Report File Name Data_%H%M%S

☑ Auto Save How long would you like to save your logging data ?

0 (Day) 0 (Hour) 1 (Minute)

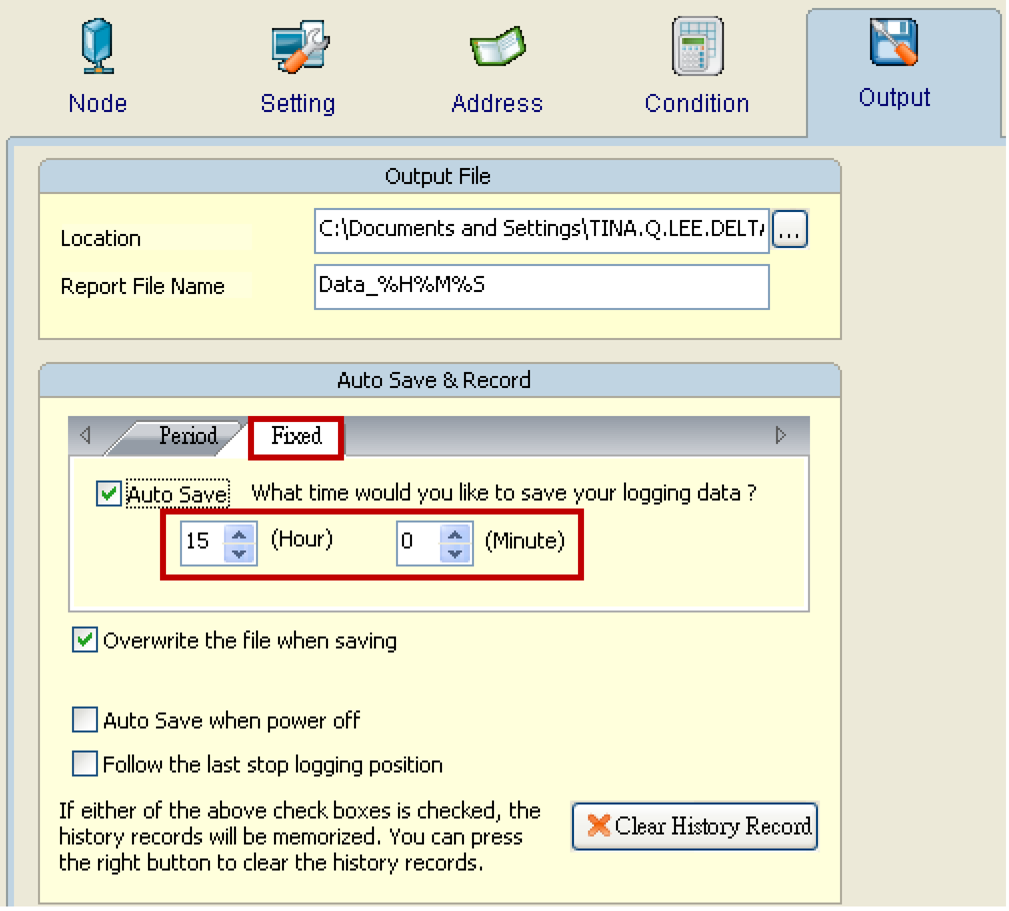
☑ Overwrite the file when saving

☐ Auto Save when power off

☐ Follow the last stop logging position

If either of the above check boxes is checked, the history records will be memorized. You can press the right button to clear the history records.

Fixed time format is 24h. A day could only save one time. If set fixed time to 15 hour, it means it will save file at 15 hour in a day and refer to Excel sheet to repeat, add a new file or add a new sheet.



Location: C:\Documents and Settings\TINA.Q.LEE.DELT/

Report File Name: Data_%H%M%S

☑ Auto Save What time would you like to save your logging data ?

15 (Hour) 0 (Minute)

☑ Overwrite the file when saving

☐ Auto Save when power off

☐ Follow the last stop logging position

If either of the above check boxes is checked, the history records will be memorized. You can press the right button to clear the history records.

D. Overwrite the file when saving

This function default is enable, it means when logging data is not full with data range, it will keep saving data into the same file. If disable this function, it means when logging data is not full with data range, it will save as file and will not overwrite data.

- Set one minute to auto save file, scan time is five minutes, data range is 20, disable overwrite the file when saving :

When time arrived one minute, the data range still not full, and due to disable overwrite the file when saving option, the file will save as file according to one minute.

- Set one minute to auto save file, scan time is five minutes, data range is 20, enable overwrite the file when saving :

When time arrived one minute, the data range still not full, and due to enable overwrite the file when saving option, the data will overwrite to the same file until the data range full and will according to repeat, add a new file or add a new sheet to save file.

E. Auto Save when power off

This option provide when HMI power off, eServer will auto save the currently data.

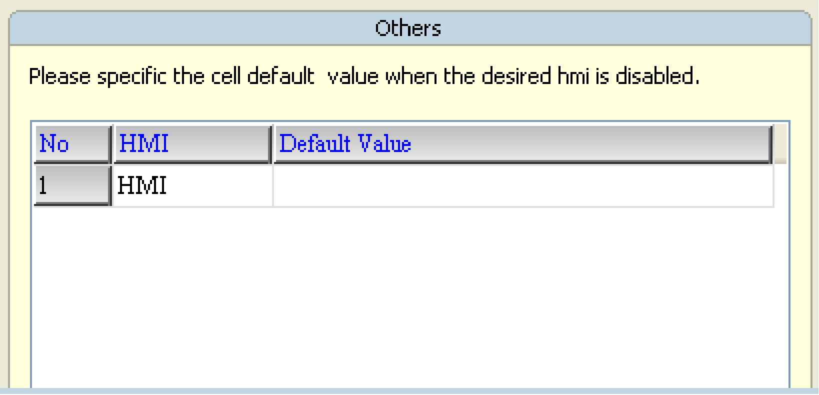
F. Follow the last stop logging position

When user enable this function, it means eServer follow the last stop logging position to continue logged and will not clear the previously data.

G. Clear History Record

User could press this Clear History Record button to clear all previously logging data.

4.1.7 Other Setting



Others

Please specific the cell default value when the desired hmi is disabled.

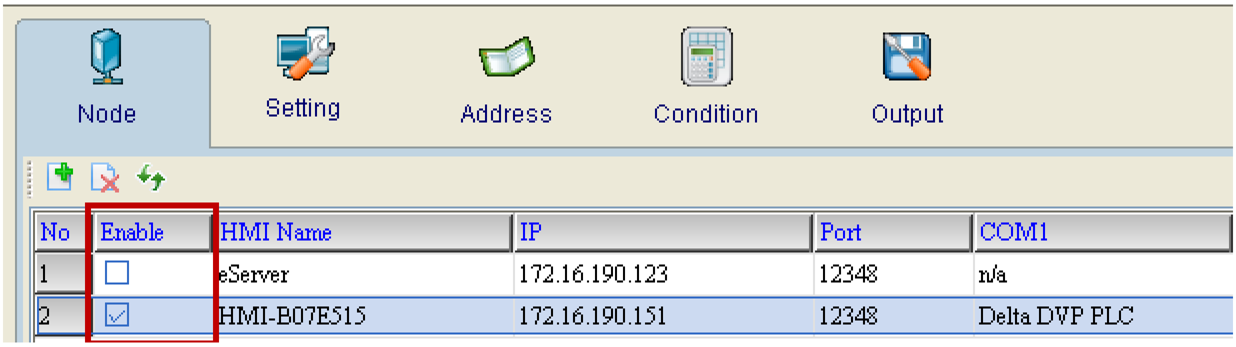
No	HMI	Default Value
1	HMI	

This function only at Excel and ODBC logging and have to fill with default value when uncheck usage. If use Recipe logging, this function does not have to fill with default value, so uncheck usage node at Recipe just means without connection.

Excel：

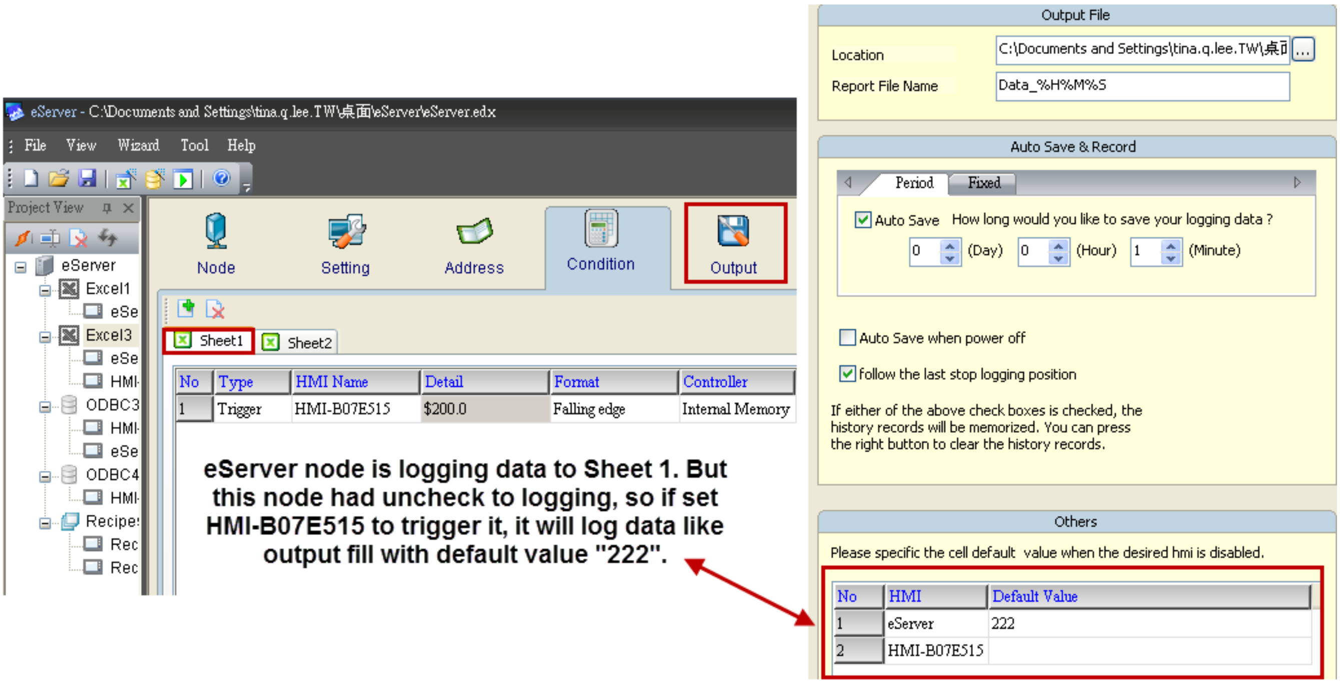
When user create multi-nodes, but it does not need to use one of them, eServer provide function for user could select if execute node to logging data or not.

Step1. Uncheck eServer node to logging.


Node
Setting
Address
Condition
Output

No	Enable	HMI Name	IP	Port	COM1
1	☐	eServer	172.16.190.123	12348	n/a
2	☑	HMI-B07E515	172.16.190.151	12348	Delta DVP PLC

Step2. If uncheck usage each node, it have to fill with some default numeric data at Output setting. Users could fill with empty or some numeric like 222.


eServer - C:\Documents and Settings\tina.q.lee.TW\桌面\eServer\eServer.edx
File
View
Wizard
Tool
Help
Project View
eServer
Excel1
eSe
Excel3
eSe
HMI-
ODBC3
HMI-
eSe
ODBC4
HMI-
Recipe
Rec
Rec
Node
Setting
Address
Condition
Output
Sheet1
Sheet2

No	Type	HMI Name	Detail	Format	Controller
1	Trigger	HMI-B07E515	$200.0	Falling edge	Internal Memory

eServer node is logging data to Sheet 1. But this node had uncheck to logging, so if set HMI-B07E515 to trigger it, it will log data like output fill with default value "222".

Output File

Location: C:\Documents and Settings\tina.q.lee.TW\桌面

Report File Name: Data_%H%M%S

Auto Save & Record

Period | Fixed

☑ Auto Save How long would you like to save your logging data ?

0 (Day) 0 (Hour) 1 (Minute)

☐ Auto Save when power off

☑ follow the last stop logging position

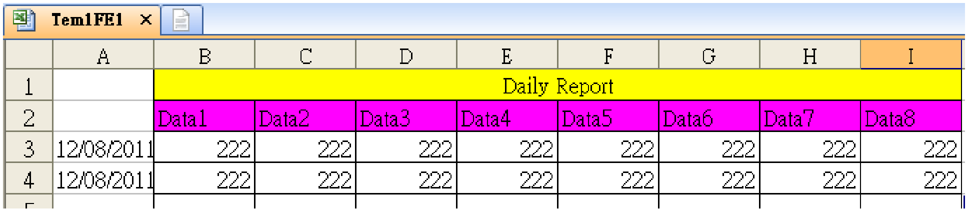
If either of the above check boxes is checked, the history records will be memorized. You can press the right button to clear the history records.

Others

Please specific the cell default value when the desired hmi is disabled.

No	HMI	Default Value
1	eServer	222
2	HMI-B07E515	

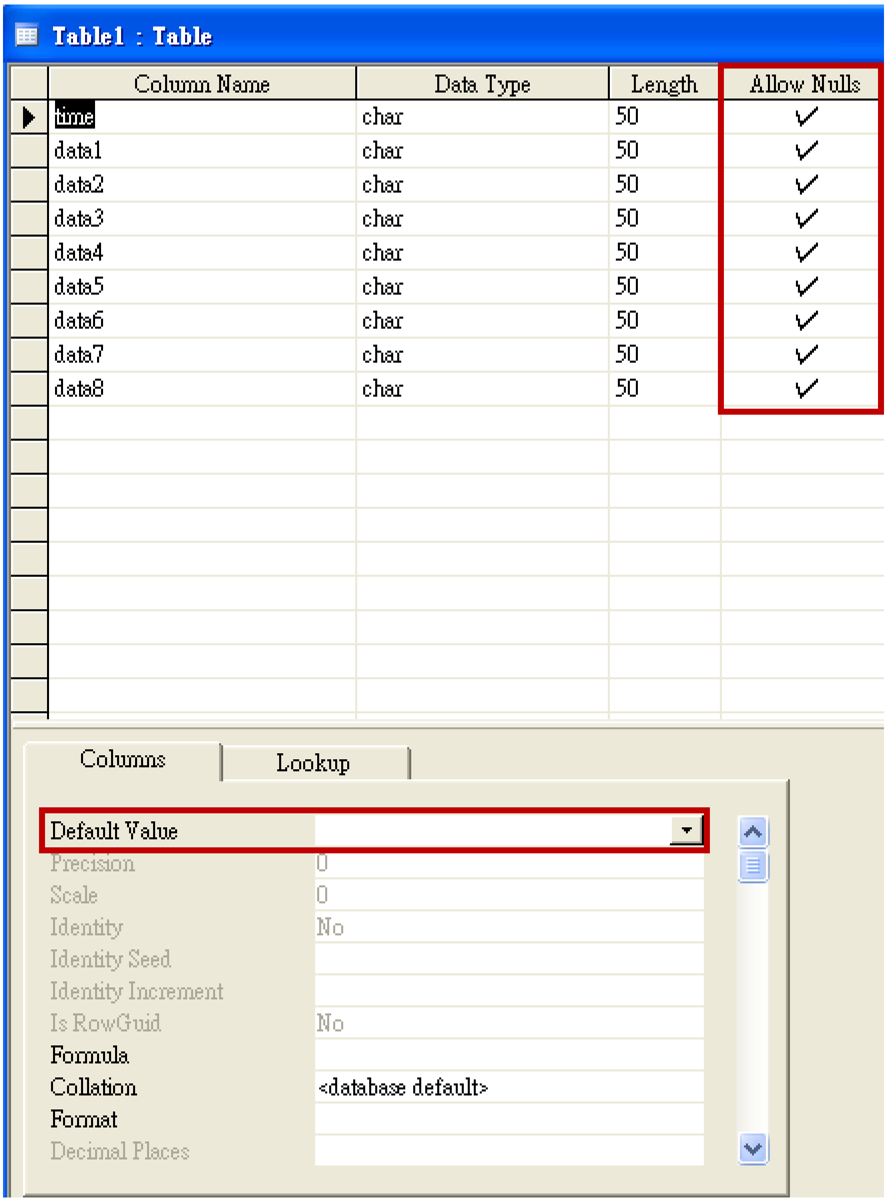
Step3. When trigger $200.0 at HMI-B07E515 node, the excel data will fill with 222.



	A	B	C	D	E	F	G	H	I
1		Daily Report							
2		Data1	Data2	Data3	Data4	Data5	Data6	Data7	Data8
3	12/08/2011	222	222	222	222	222	222	222	222
4	12/08/2011	222	222	222	222	222	222	222	222

ODBC：

ODBC logging also provide user could select usage node or not. And the default value is according to each ODBC data base setting to data table for “allow nulls” and “default value”.



Column Name	Data Type	Length	Allow Nulls
time	char	50	✓
data1	char	50	✓
data2	char	50	✓
data3	char	50	✓
data4	char	50	✓
data5	char	50	✓
data6	char	50	✓
data7	char	50	✓
data8	char	50	✓

Default Value	
Precision	0
Scale	0
Identity	No
Identity Seed	
Identity Increment	
Is RowGuid	No
Formula	
Collation	<database default>
Format	
Decimal Places	

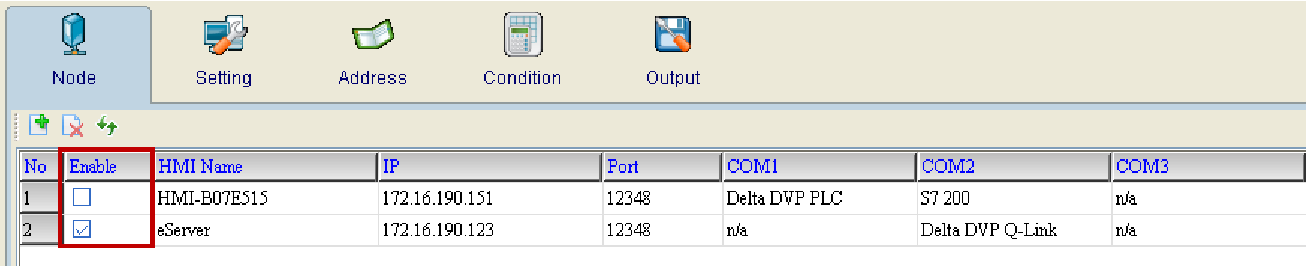
Allow nulls have three kinds of state:

a. If set allow nulls for not null and uncheck usage then logging data, eServer will display error message and stop logging.

b. If set allow nulls for null and does not set default value, eServer will fill with empty to replace data.

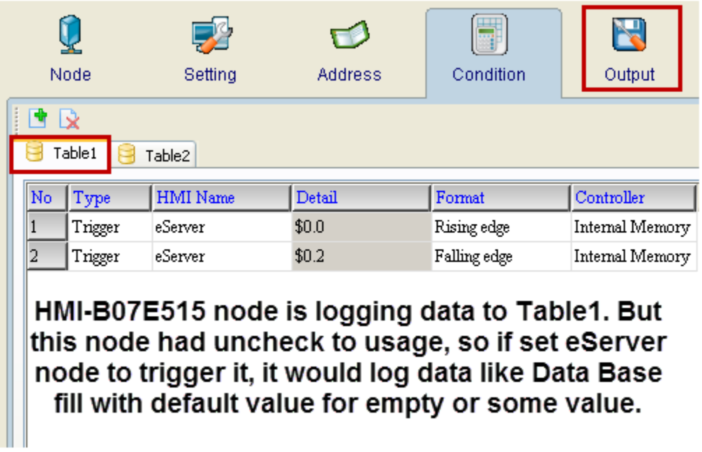
c. If set allow nulls for null and does set default value like 222, eServer will fill with 222 to replace data.

Step1. Uncheck HMI-B07E515 node to logging.



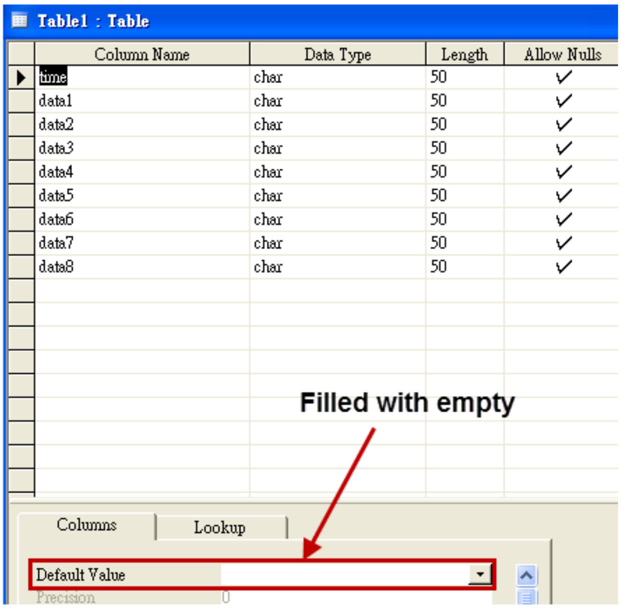
No	Enable	HMI Name	IP	Port	COM1	COM2	COM3
1	☐	HMI-B07E515	172.16.190.151	12348	Delta DVP PLC	S7 200	n/a
2	☑	eServer	172.16.190.123	12348	n/a	Delta DVP Q-Link	n/a

Step2. Table 1 is logging data to HMI-B07E515 node. Set trigger for eServer node at Table 1.



No	Type	HMI Name	Detail	Format	Controller
1	Trigger	eServer	$0.0	Rising edge	Internal Memory
2	Trigger	eServer	$0.2	Falling edge	Internal Memory

HMI-B07E515 node is logging data to Table1. But this node had uncheck to usage, so if set eServer node to trigger it, it would log data like Data Base fill with default value for empty or some value.



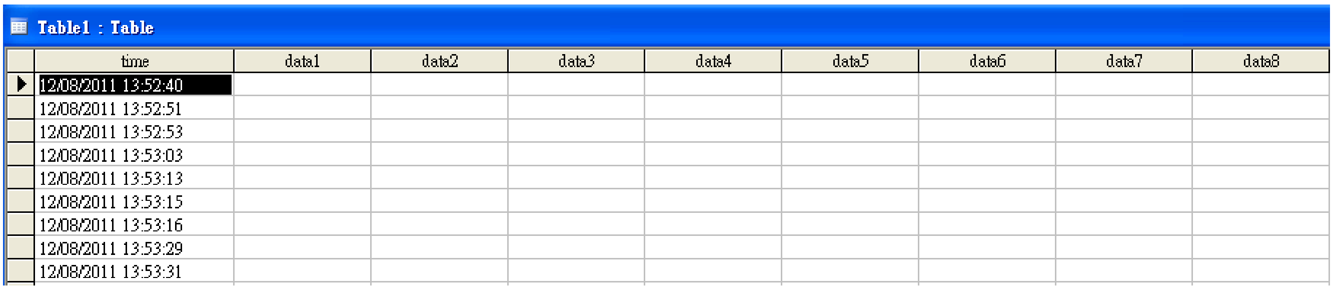
Column Name	Data Type	Length	Allow Nulls
time	char	50	✓
data1	char	50	✓
data2	char	50	✓
data3	char	50	✓
data4	char	50	✓
data5	char	50	✓
data6	char	50	✓
data7	char	50	✓
data8	char	50	✓

Filled with empty

Default Value

Precision 0

Step3. When trigger on $0.0 and $0.2 at eServer node, the table1 would fill with empty data.



time	data1	data2	data3	data4	data5	data6	data7	data8
12/08/2011 13:52:40								
12/08/2011 13:52:51								
12/08/2011 13:52:53								
12/08/2011 13:53:03								
12/08/2011 13:53:13								
12/08/2011 13:53:15								
12/08/2011 13:53:16								
12/08/2011 13:53:29								
12/08/2011 13:53:31								

Chapter 5 Writing Data in Microsoft Excel

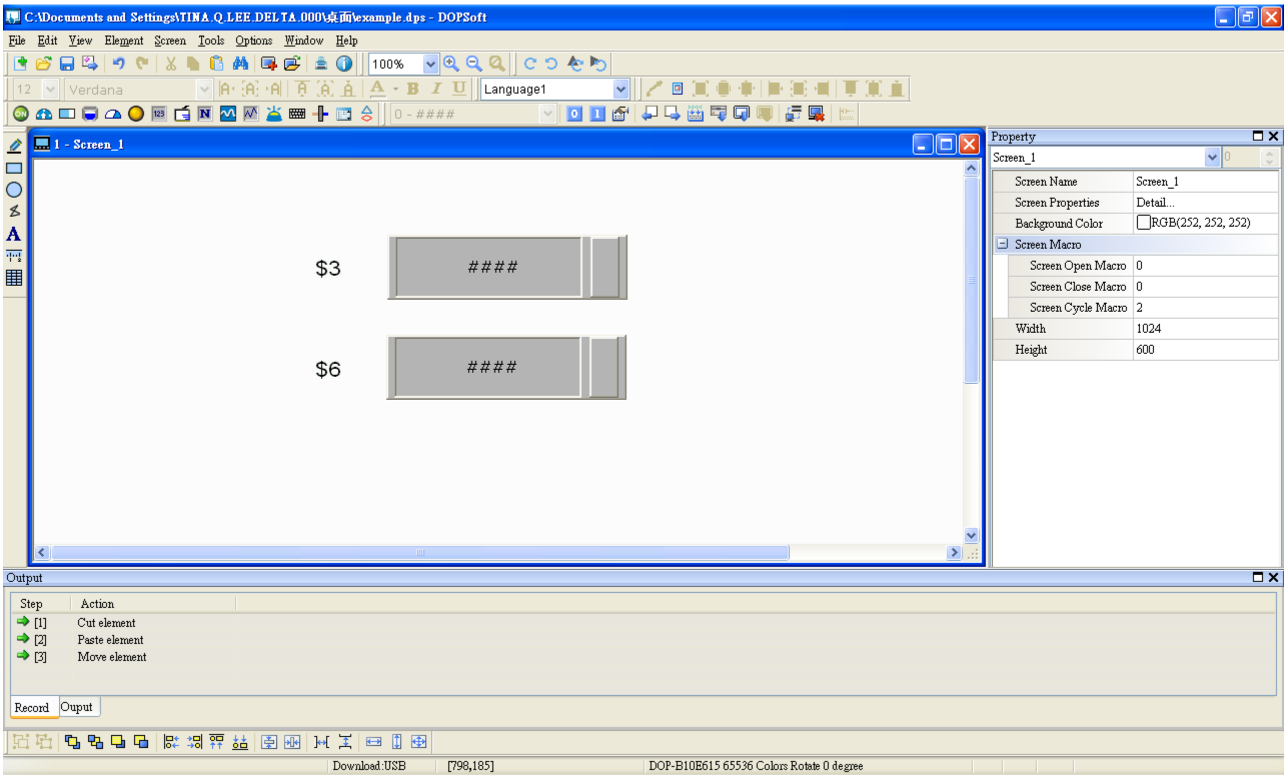
Before creating testing example, make sure to change the upload and download option (**Options > Environment**) on DOPSoft first. The default setting of upload and download is via **USB**. If the users need to use **Ethernet**, please change the default setting by referring to **Appendix A**.

5.1 Example

This example is used to help the users to understand how to use eServer to read the data of the register addresses $3 and $6 every second, record the data in Excel report file; meanwhile, calculate the average value of the register addresses $3 and $6 by using Excel formula and save the collected data in the specified folder (C:\Data).

5.1.1 Create HMI Project File

Start DOPSoft Software program and click **File > New** or click **New** icon to create a new project. Then, click **Element > Input > Numeric Entry** to create two numeric entry elements ($3 and $6) on the screen. In this case, 10 inches color B10E615 type DOP series HMI is used.


C:\Documents and Settings\TINA.Q.LEE.DELTA.000\桌面\example.dps - DOPSoft
File Edit View Element Screen Tools Options Window Help
100%
12
Verdana
Language1
0 - ####
1 - Screen_1
$3
####
$6
####
Property
Record
Ouput
Download:USB
[798,185]
DOP-B10E615 65536 Colors Rotate 0 degree

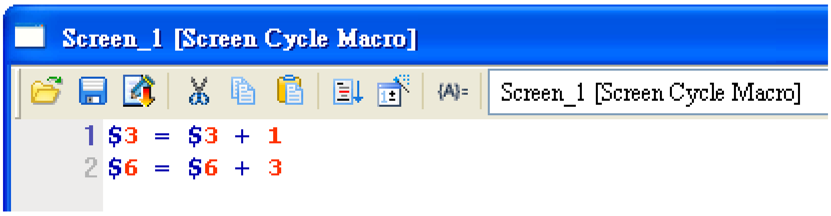
Screen_1

Screen Name	Screen_1
Screen Properties	Detail...
Background Color	RGB(252, 252, 252)
Screen Macro	
Screen Open Macro	0
Screen Close Macro	0
Screen Cycle Macro	2
Width	1024
Height	600

Output

Step	Action
[1]	Cut element
[2]	Paste element
[3]	Move element

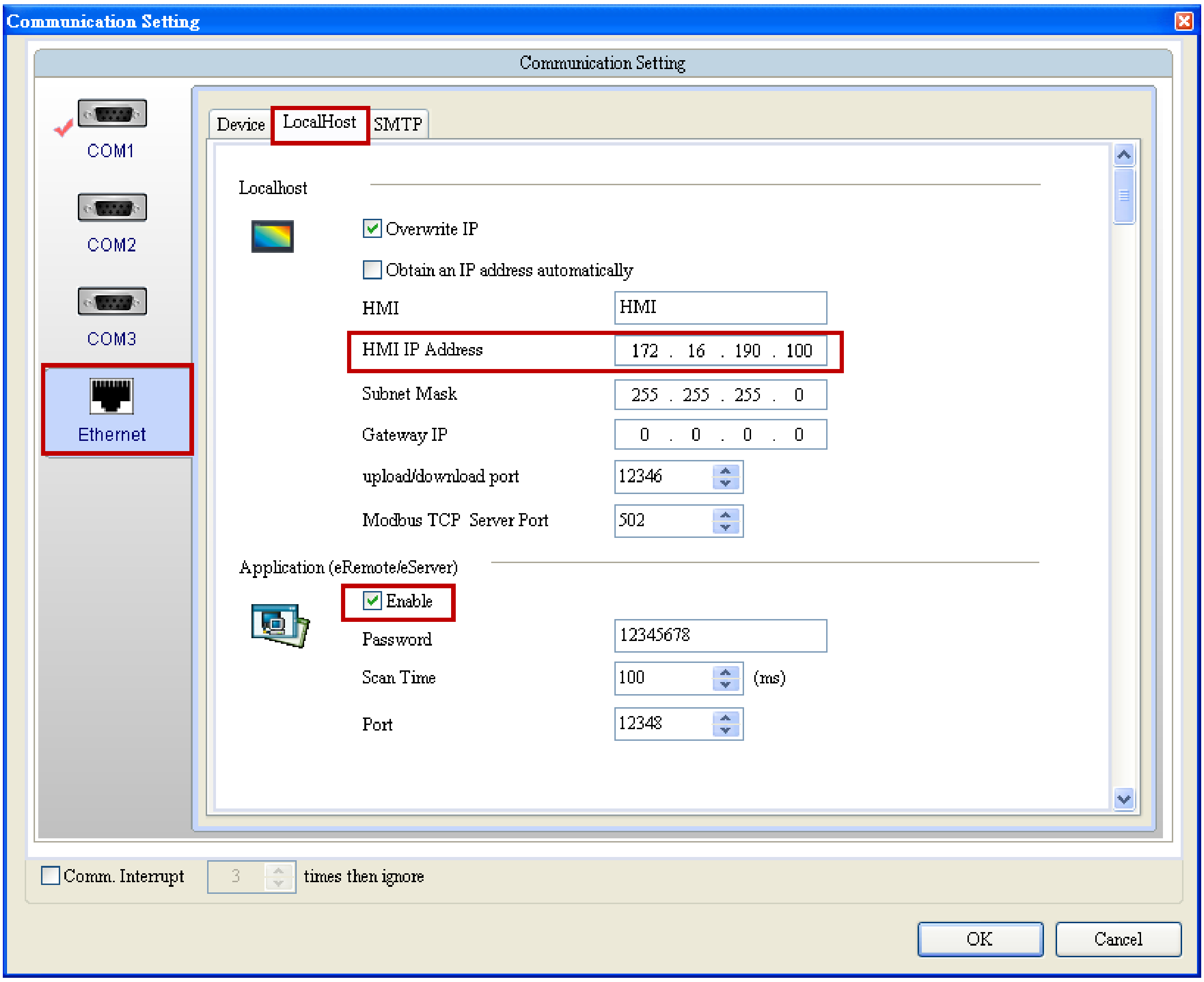
Use Screen Cycle Macro and enter the following commands in macro command window.



Screen_1 [Screen Cycle Macro]

```
$3 = $3 + 1
$6 = $6 + 3
```

Click **Options > Communication Setting > Ethernet > LocalHost,** set HMI IP Address and check the Application(eRemote / eServer) function **Enable.** Then, press **OK** button to finish the settings.



Communication Setting
COM1
COM2
COM3
Ethernet
Device
LocalHost
SMTP

Localhost

☑ Overwrite IP

☐ Obtain an IP address automatically

HMI: HMI

HMI IP Address: 172 . 16 . 190 . 100

Subnet Mask: 255 . 255 . 255 . 0

Gateway IP: 0 . 0 . 0 . 0

upload/download port: 12346

Modbus TCP Server Port: 502

Application (eRemote/eServer)

☑ Enable

Password: 12345678

Scan Time: 100 (ms)

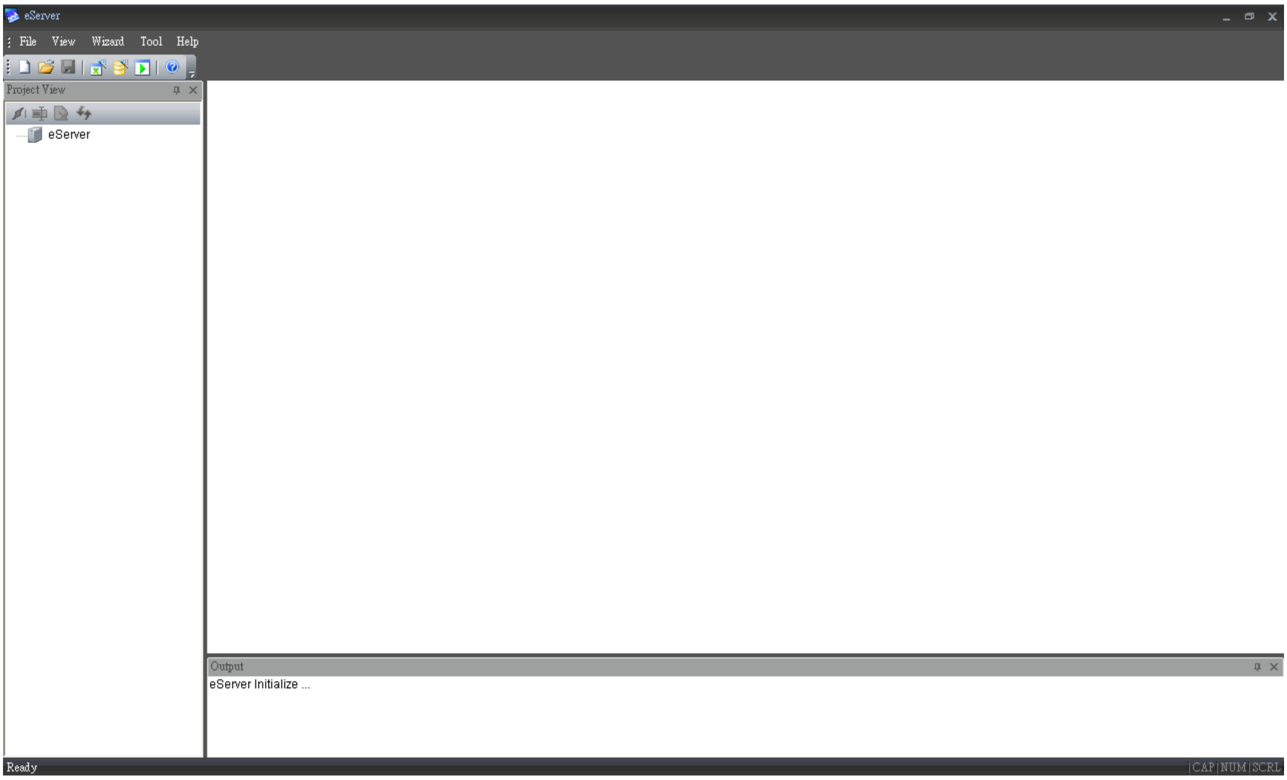
Port: 12348

☐ Comm. Interrupt 3 times then ignore

OK
Cancel

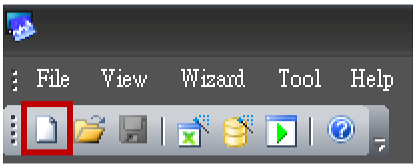
5.1.2 eServer Setting

1. After eServer is started, eServer window will open.

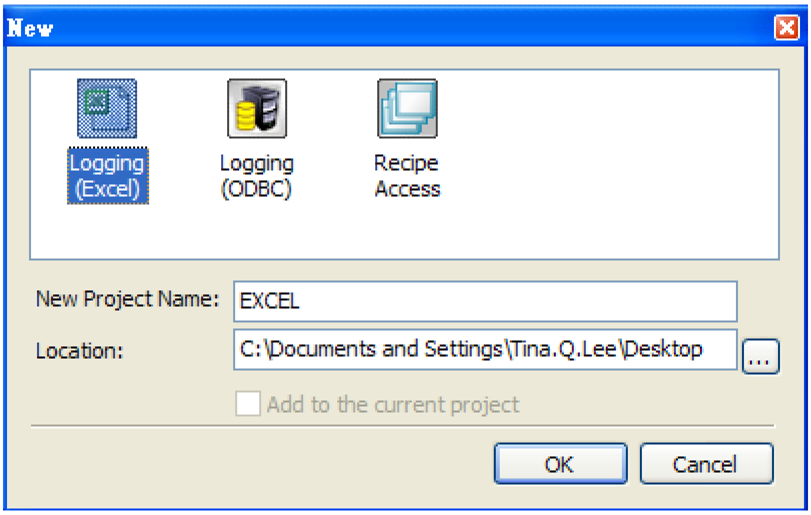

eServer
File
View
Wizard
Tool
Help
Project View
eServer
Output
Ready
CAP NUM SCRL

eServer Initialize ...

3. Click **File > New** or click icon to create a new project file.


File
View
Wizard
Tool
Help

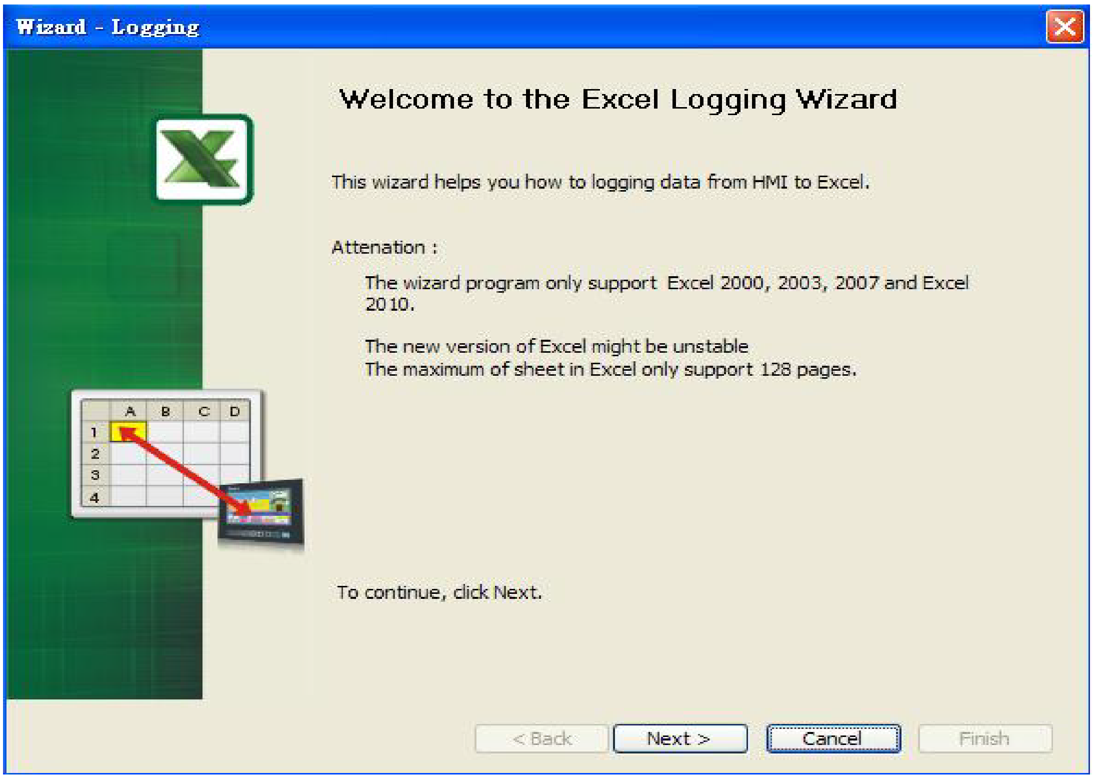
4. Select icon to enable Excel Logging (Sampling) Wizard.


New
Logging (Excel)
Logging (ODBC)
Recipe Access
...
OK
Cancel

New Project Name: EXCEL

Location: C:\Documents and Settings\Tina.Q.Lee\Desktop

☐ Add to the current project


Wizard - Logging
A
B
C
D
1
2
3
4
< Back
Next >
Cancel
Finish

Welcome to the Excel Logging Wizard

This wizard helps you how to logging data from HMI to Excel.

Attenation :

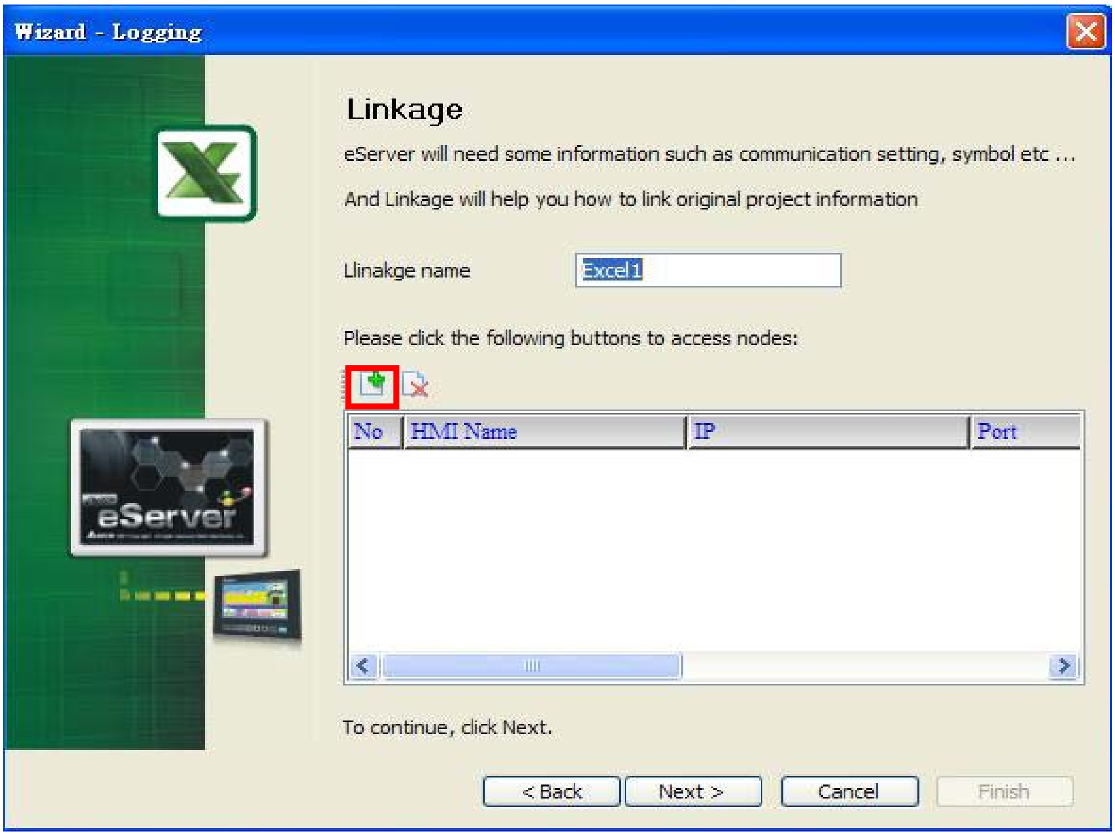
The wizard program only support Excel 2000, 2003, 2007 and Excel 2010.

The new version of Excel might be unstable
The maximum of sheet in Excel only support 128 pages.

To continue, click Next.

Press **Next** button to go to next step.

5. Click **New** icon to access nodes (link to HMI).


Wizard - Logging
eServer
< Back
Next >
Cancel
Finish

Linkage

eServer will need some information such as communication setting, symbol etc ...

And Linkage will help you how to link original project information

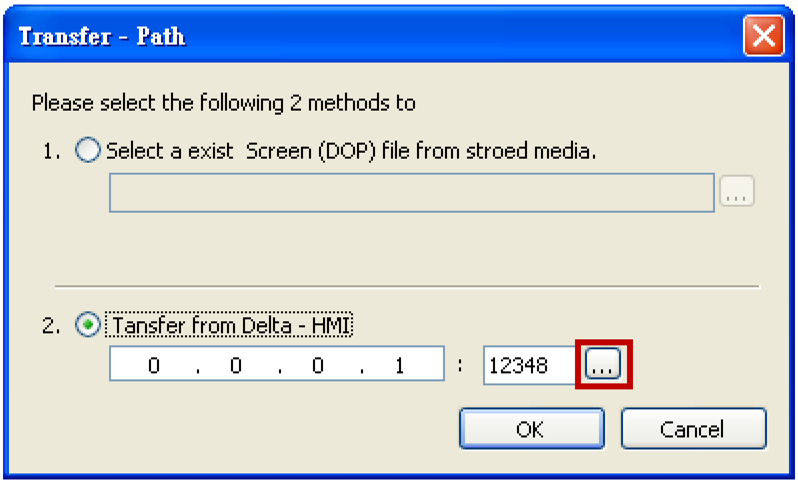
Llinakge name Excel1

Please click the following buttons to access nodes:

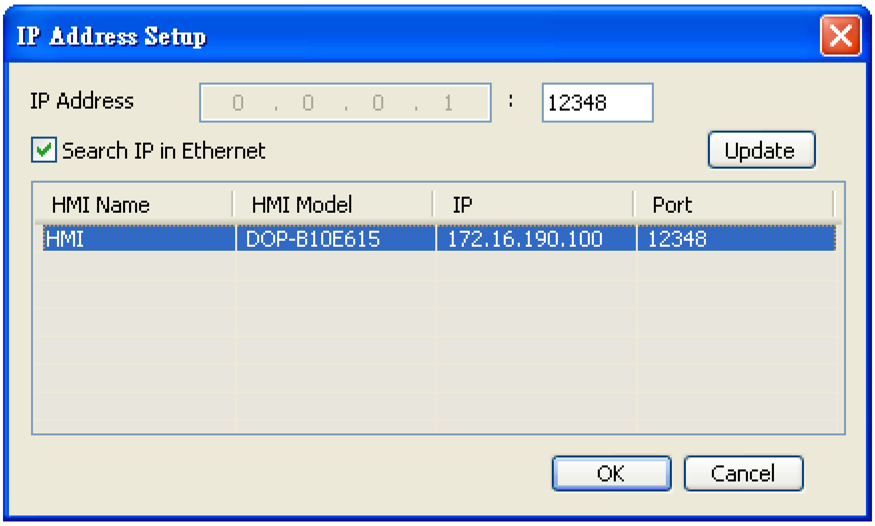
No	HMI Name	IP	Port

To continue, click Next.

Choose **Transfer from Delta – HMI** option to transfer the HMI screen project file via network communication directly.

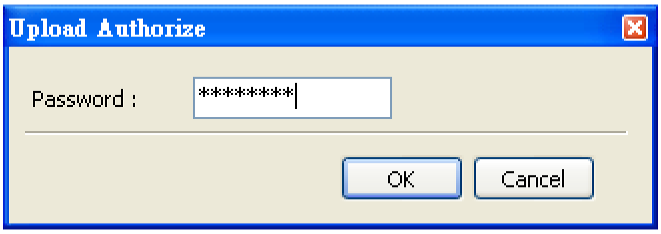

Transfer - Path
Please select the following 2 methods to
1. ○ Select a exist Screen (DOP) file from stroed media.
...
2. ● Tansfer from Delta - HMI
0 . 0 . 0 . 1 : 12348
...
OK
Cancel

After searching HMI IP in Ethernet, select HMI Name is HMI, IP is 172.16.190.100, press **OK**.

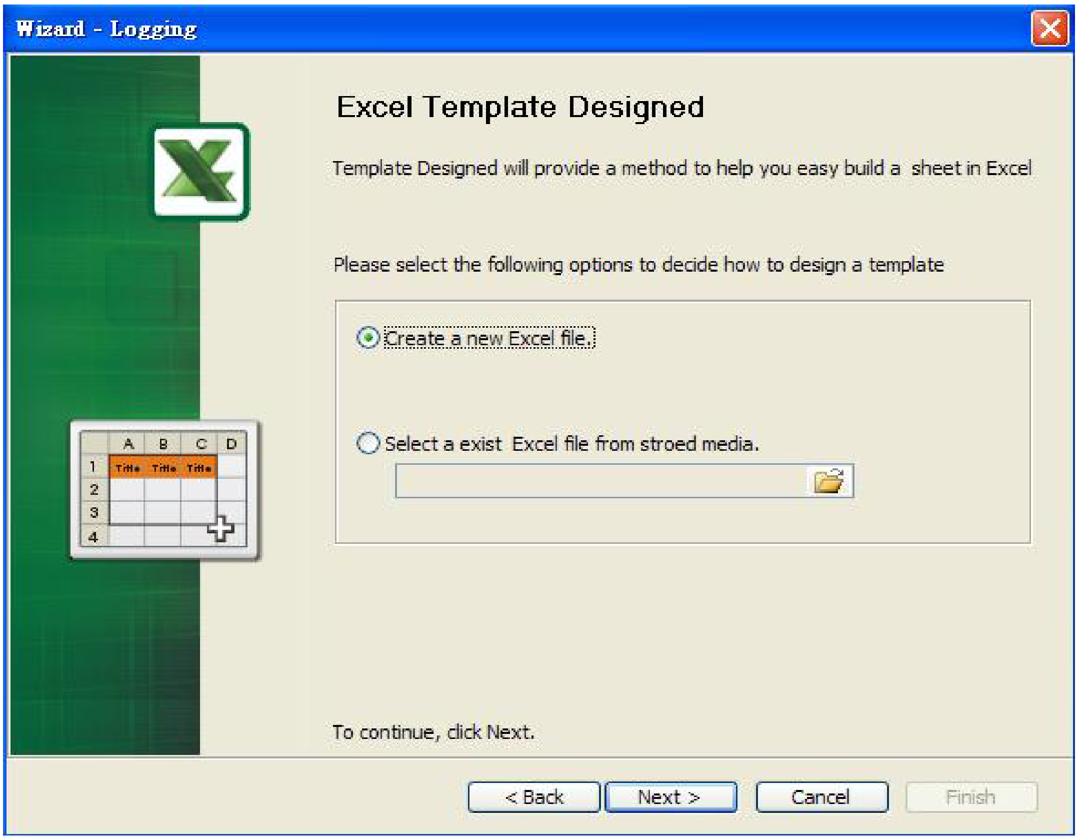

IP Address Setup
IP Address
0 . 0 . 0 . 1
:
12348
☑ Search IP in Ethernet
Update
OK
Cancel

HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348

eServer will ask user to input the authorize password to connected with HMI. (The default password is 12345678.)


Upload Authorize
Password :
****
OK
Cancel

6. Design Excel template sheet. Select **Create a new Excel file** option and press **Next** button to go to next step.



Excel Template Designed

Template Designed will provide a method to help you easy build a sheet in Excel

Please select the following options to decide how to design a template

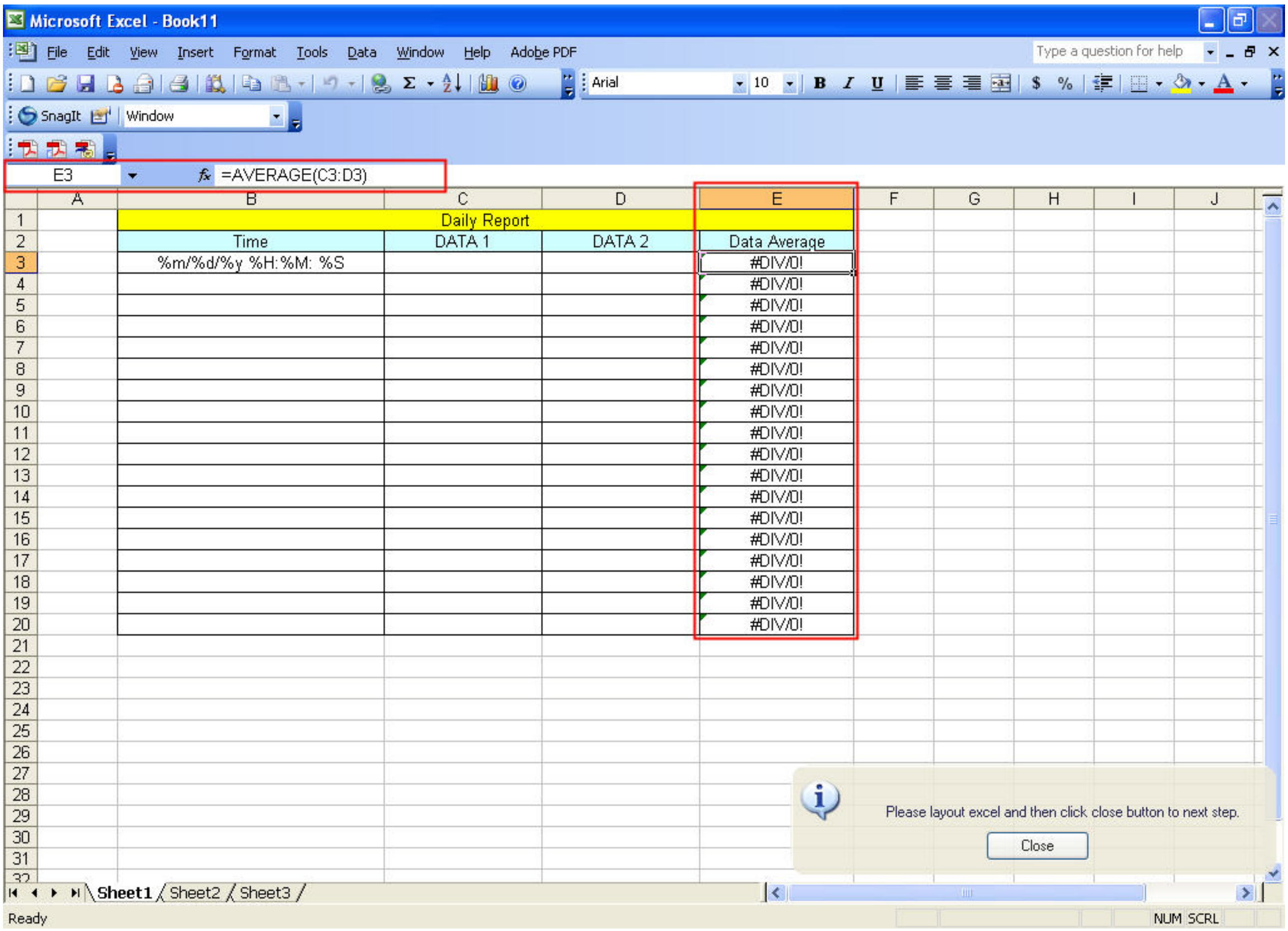
● Create a new Excel file.

○ Select a exist Excel file from stroed media.

To continue, click Next.

The system will enable Excel automatically. Create a Excel template sheet as the figure below and enter the following formulas into the cells of E3 ~ E20 in order. Then, press Close button in the dialog box which appears at the bottom right of Windows screen to go to next step.

Column	Formula	Column	Formula
E3	=AVERAGE(C3:D3)	E12	=AVERAGE(C12:D12)
E4	=AVERAGE(C4:D4)	E13	=AVERAGE(C13:D13)
E5	=AVERAGE(C5:D5)	E14	=AVERAGE(C14:D14)
E6	=AVERAGE(C6:D6)	E15	=AVERAGE(C15:D15)
E7	=AVERAGE(C7:D7)	E16	=AVERAGE(C16:D16)
E8	=AVERAGE(C8:D8)	E17	=AVERAGE(C17:D17)
E9	=AVERAGE(C9:D9)	E18	=AVERAGE(C18:D18)
E10	=AVERAGE(C10:D10)	E19	=AVERAGE(C19:D19)
E11	=AVERAGE(C11:D11)	E20	=AVERAGE(C20:D20)


Microsoft Excel - Book11
File Edit View Insert Format Tools Data Window Help Adobe PDF
Type a question for help
Arial
10
SnagIt
Window
Sheet1 Sheet2 Sheet3
Ready
NUM SCRL

E3 =AVERAGE(C3:D3)

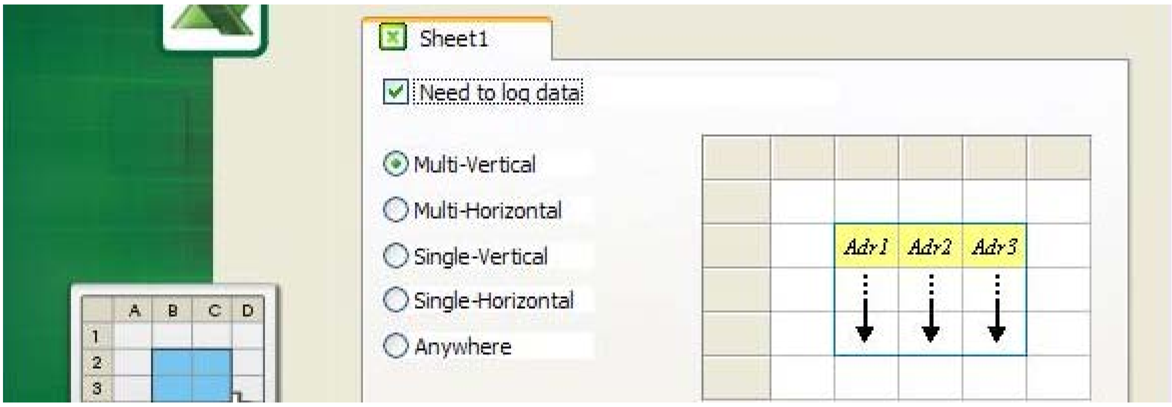
	A	B	C	D	E
1		Daily Report			
2		Time	DATA 1	DATA 2	Data Average
3		%m/%d/%y %H:%M: %S			#DIV/0!
4					#DIV/0!
5					#DIV/0!
6					#DIV/0!
7					#DIV/0!
8					#DIV/0!
9					#DIV/0!
10					#DIV/0!
11					#DIV/0!
12					#DIV/0!
13					#DIV/0!
14					#DIV/0!
15					#DIV/0!
16					#DIV/0!
17					#DIV/0!
18					#DIV/0!
19					#DIV/0!
20					#DIV/0!

Please layout excel and then click close button to next step.

Close

7. Excel Logging Range Setting

   7.1 Set the sampling direction as **Multi-Vertical**.



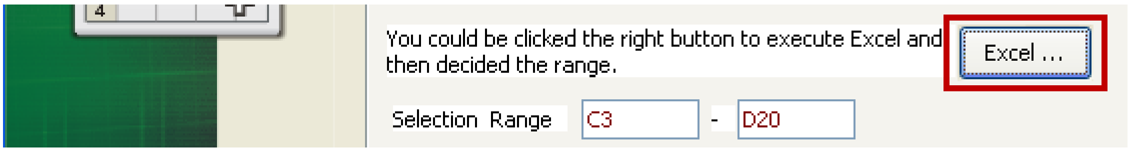
Sheet1

☑ Need to log data

● Multi-Vertical
○ Multi-Horizontal
○ Single-Vertical
○ Single-Horizontal
○ Anywhere

Adr1
Adr2
Adr3
A
B
C
D
1
2
3

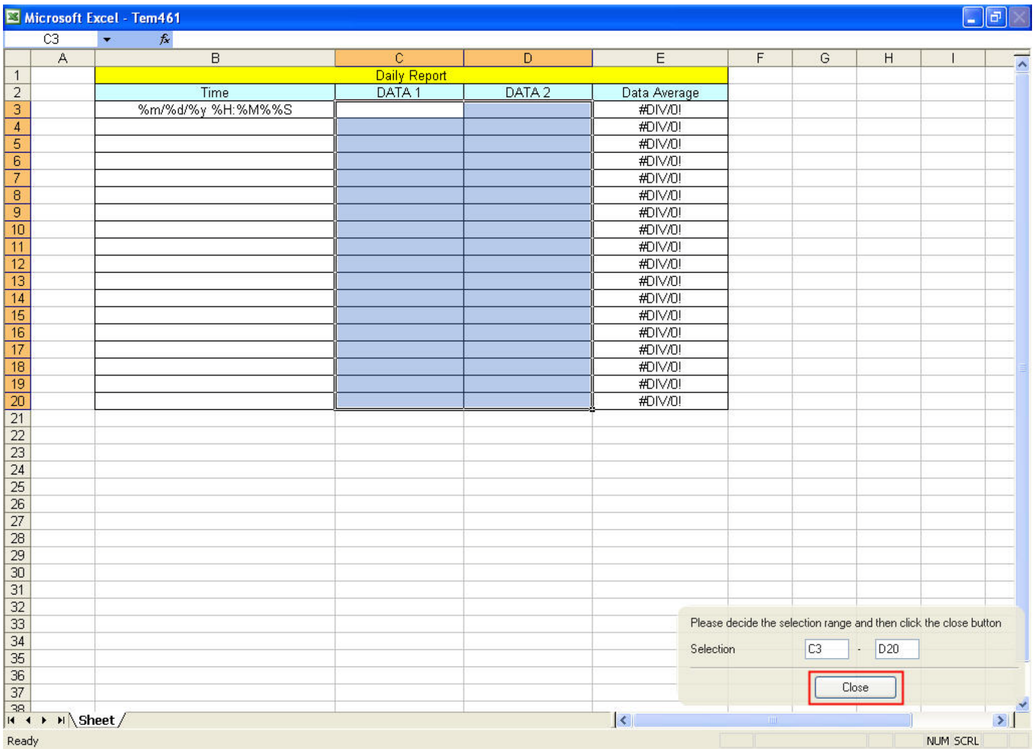
   7.2 Press **Excel** button and the system will open the editing Excel template sheet immediately.



You could be clicked the right button to execute Excel and then decided the range.

Selection Range C3 - D20

7.3 In Excel template sheet, the users can drag the mouse to select the selection range. In this case, C3 ~ D20 is selected. Then, press **Close** button to finish.

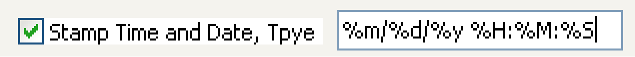

Microsoft Excel - Tem461
C3
Sheet
Ready
NUM SCRL
Close

	A	B	C	D	E
1			Daily Report		
2		Time	DATA 1	DATA 2	Data Average
3		%m/%d/%y %H:%M%%S			#DIV/0!
4					#DIV/0!
5					#DIV/0!
6					#DIV/0!
7					#DIV/0!
8					#DIV/0!
9					#DIV/0!
10					#DIV/0!
11					#DIV/0!
12					#DIV/0!
13					#DIV/0!
14					#DIV/0!
15					#DIV/0!
16					#DIV/0!
17					#DIV/0!
18					#DIV/0!
19					#DIV/0!
20					#DIV/0!

Please decide the selection range and then click the close button

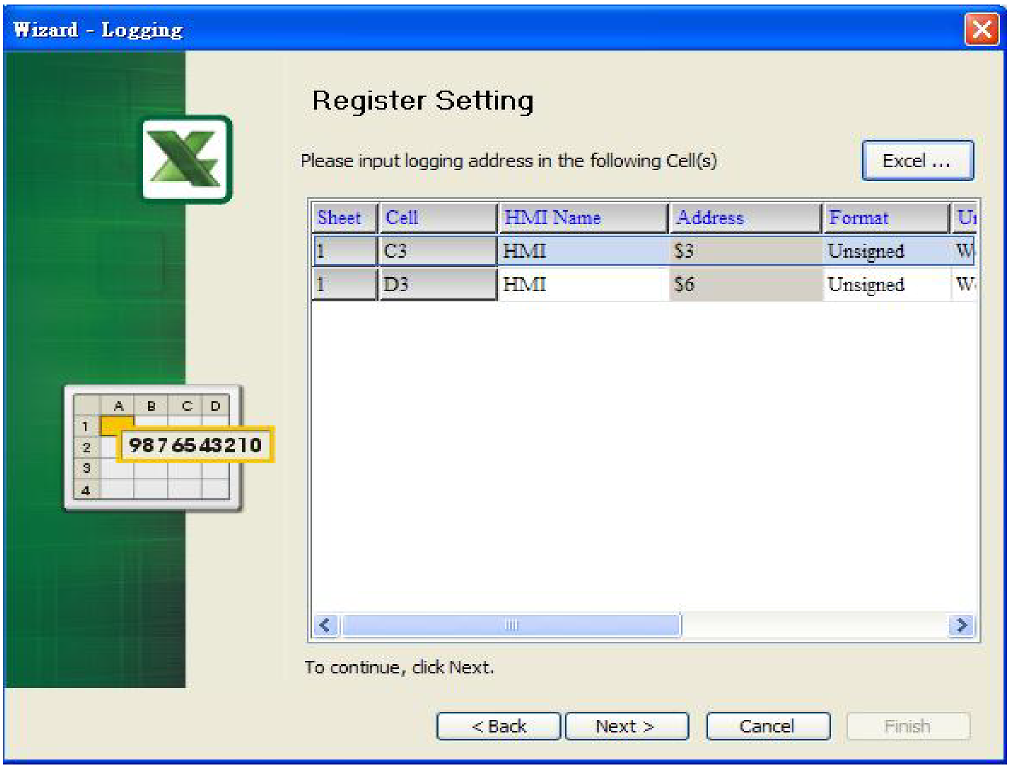
Selection C3 - D20

7.4 Check the check box before **Enable Stamp Time and Date** function and change the format to **%m/%d/%y %H:%M:%S**. Once the sampling operation is enabled, the sampling date and time will be recorded into the cells of B3 ~B20.



☑ Stamp Time and Date, Tpye %m/%d/%y %H:%M:%S

8. Set the register addresses.


Wizard - Logging
Excel ...
9876543210
A
B
C
D
1
2
3
4
< Back
Next >
Cancel
Finish

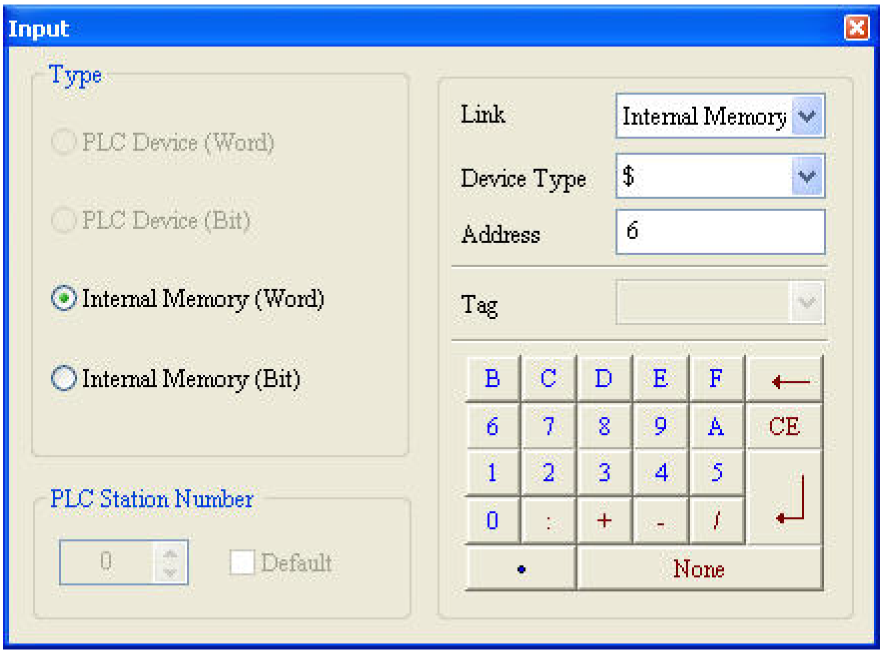
Register Setting

Please input logging address in the following Cell(s)

Sheet	Cell	HMI Name	Address	Format	U
1	C3	HMI	$3	Unsigned	W
1	D3	HMI	$6	Unsigned	W

To continue, click Next.

Use the following dialog box to set the sampling register addresses.


Input
Type
PLC Device (Word)
PLC Device (Bit)
Internal Memory (Bit)
PLC Station Number
0
Default
Tag
B C D E F
6 7 8 9 A CE
1 2 3 4 5
0 : + - /
•
None

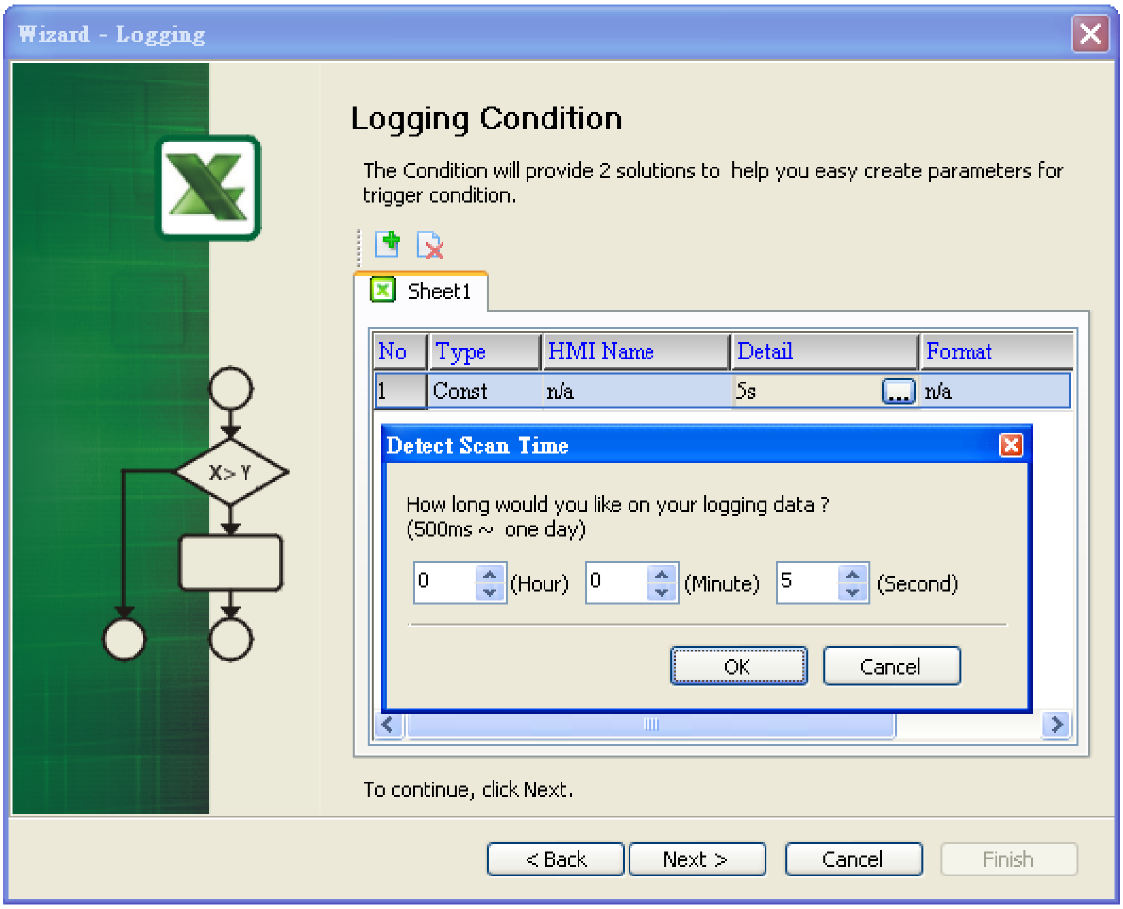
Type: ● Internal Memory (Word)

Link: Internal Memory

Device Type: $

Address: 6

9. Set Logging Condition (Sampling Time) to **5s**.


Wizard - Logging
Sheet1
X> Y
< Back
Next >
Cancel
Finish

Logging Condition

The Condition will provide 2 solutions to help you easy create parameters for trigger condition.

No	Type	HMI Name	Detail	Format
1	Const	n/a	5s	n/a

Detect Scan Time

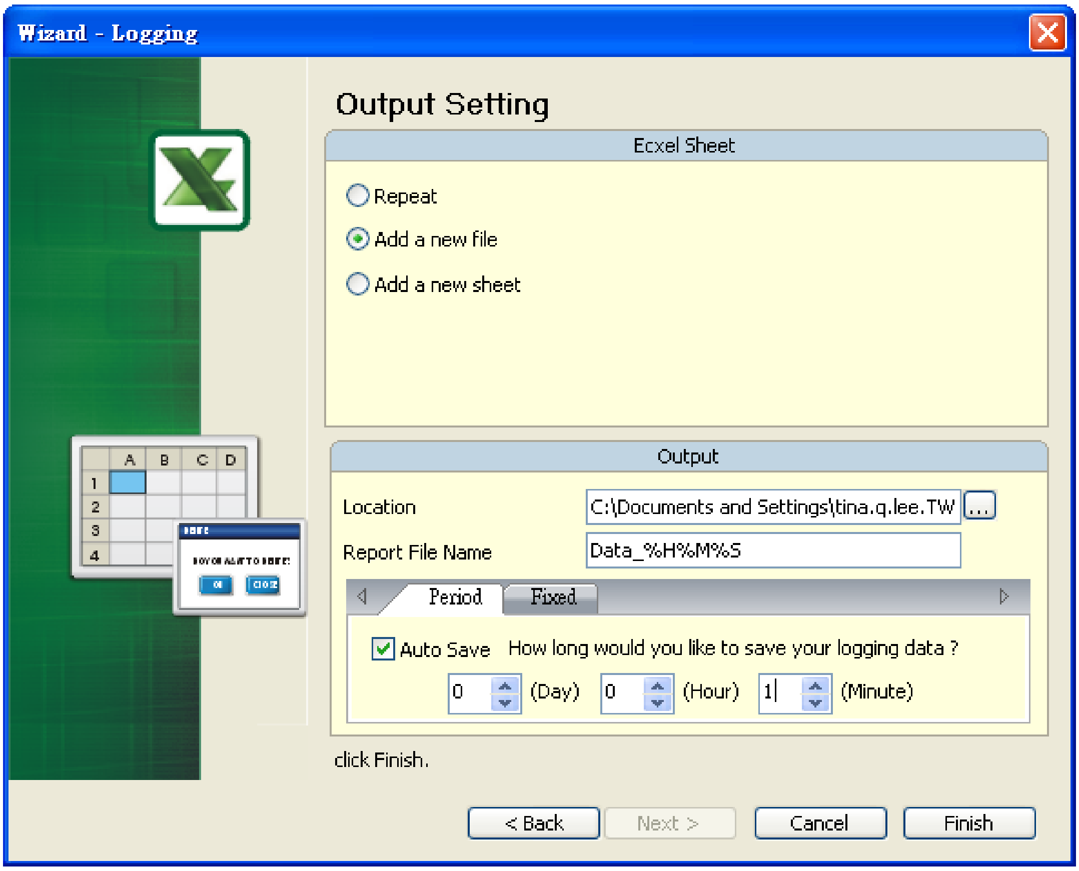
How long would you like on your logging data ?
(500ms ~ one day)

0 (Hour) 0 (Minute) 5 (Second)

OK Cancel

To continue, click Next.

10. Choose **Add a new file** in Excel Sheet and define the file location and file name shown as the figure below. Selected **Period** in **Auto Save** and set **one minute**, then press **Finish** button to complete the settings.


Wizard - Logging
< Back
Next >
Cancel
Finish

Output Setting

Ecxel Sheet

○ Repeat

● Add a new file

○ Add a new sheet

Output

Location C:\Documents and Settings\tina.q.lee.TW ...

Report File Name Data_%H%M%S

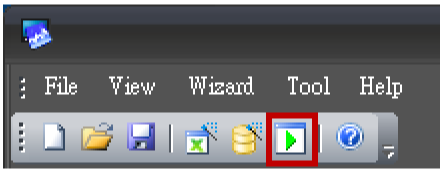
Period Fixed

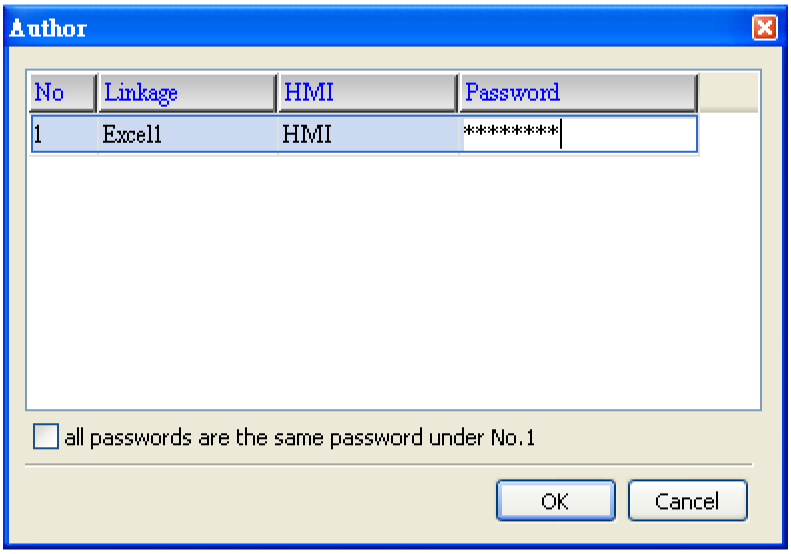
☑ Auto Save How long would you like to save your logging data ?

0 (Day) 0 (Hour) 1 (Minute)

click Finish.

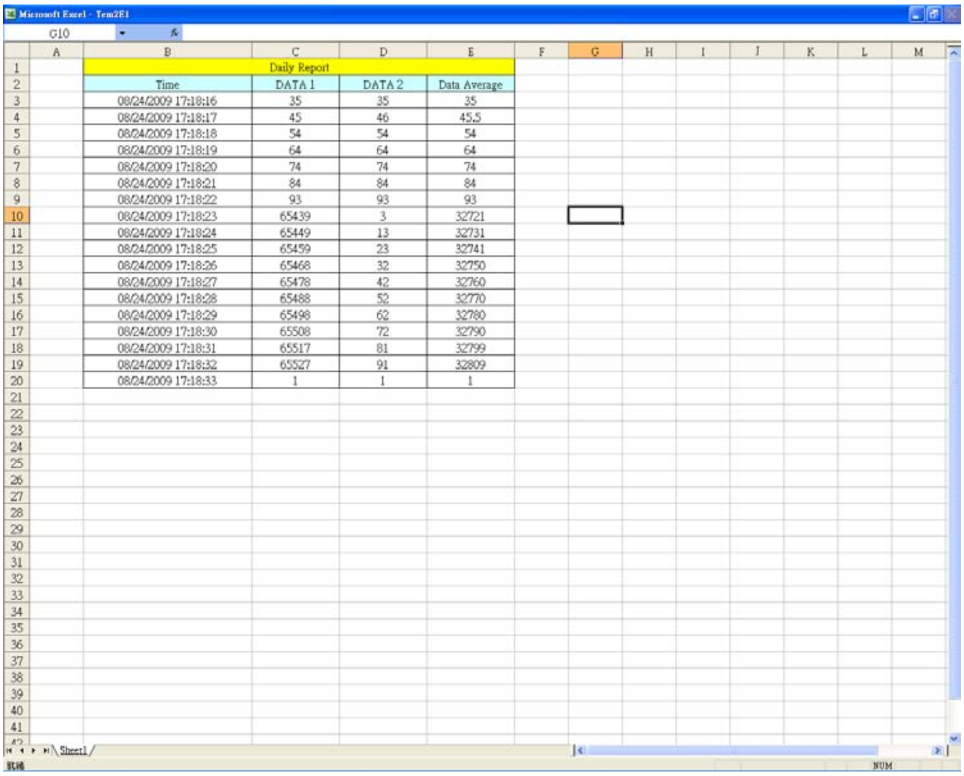
11. Press ▶ icon and enter the password 12345678. Then, the system will start sampling operation, i.e. writing data in Excel file.


File
View
Wizard
Tool
Help


Author
OK
Cancel

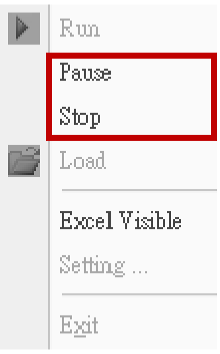
No	Linkage	HMI	Password
1	Excel1	HMI	********

☐ all passwords are the same password under No.1



Daily Report			
Time	DATA 1	DATA 2	Data Average
08/24/2009 17:18:16	35	35	35
08/24/2009 17:18:17	45	46	45.5
08/24/2009 17:18:18	54	54	54
08/24/2009 17:18:19	64	64	64
08/24/2009 17:18:20	74	74	74
08/24/2009 17:18:21	84	84	84
08/24/2009 17:18:22	93	93	93
08/24/2009 17:18:23	65439	3	32721
08/24/2009 17:18:24	65449	13	32731
08/24/2009 17:18:25	65459	23	32741
08/24/2009 17:18:26	65468	32	32750
08/24/2009 17:18:27	65478	42	32760
08/24/2009 17:18:28	65488	52	32770
08/24/2009 17:18:29	65498	62	32780
08/24/2009 17:18:30	65508	72	32790
08/24/2009 17:18:31	65517	81	32799
08/24/2009 17:18:32	65527	91	32809
08/24/2009 17:18:33	1	1	1

12. If the users want to pause or stop the sampling operation, only right-click eServer icon at the bottom right of Windows screen and select **Pause** or **Stop** option from the pop-up menu, the sampling operation will pause and stop immediately. The users also can use **Excel Visible** option to decide whether the Excel window displays on the screen or not.



Chapter 6 ODBC Sampling Setting

6.1 Detailed Settings

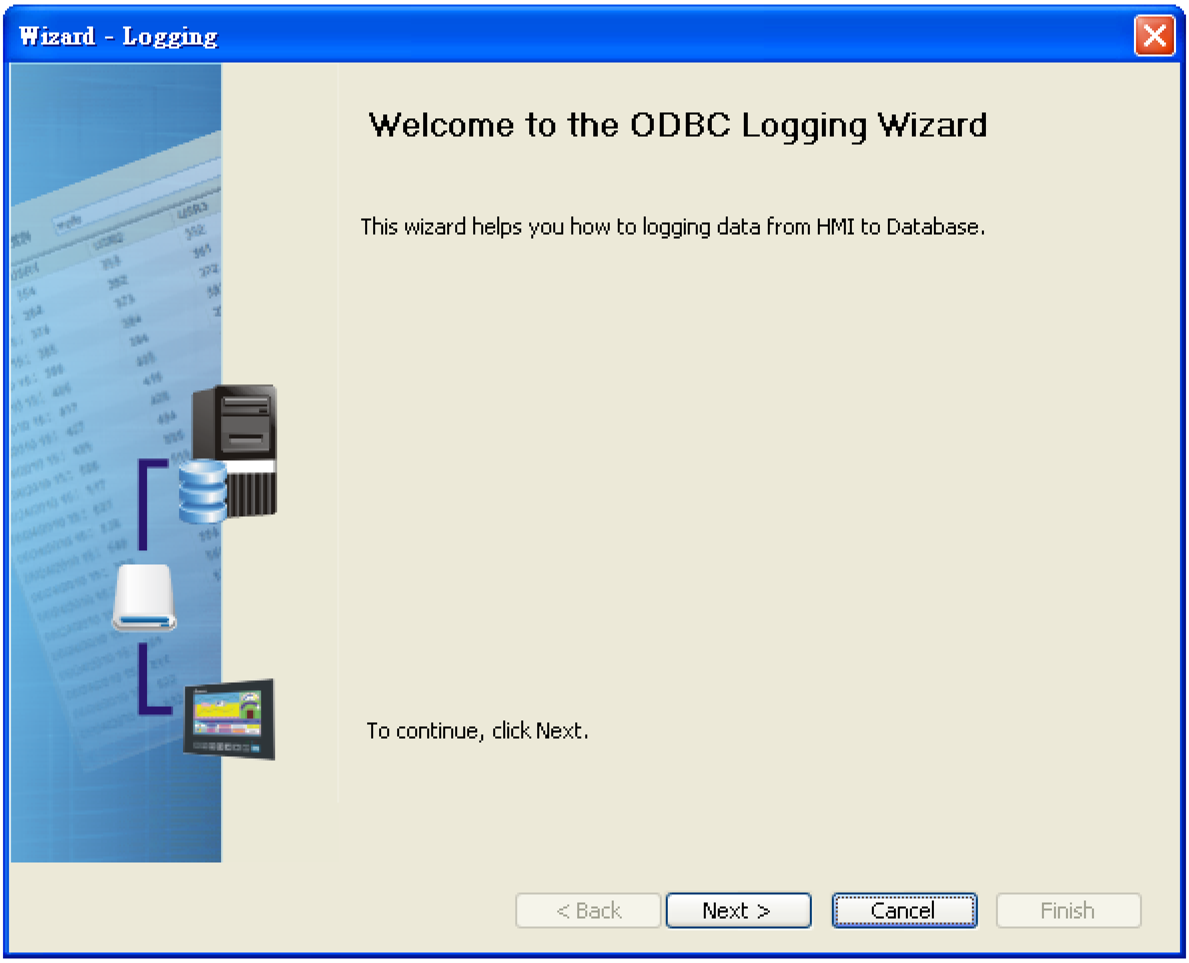
Please refer to the following steps to complete ODBC sampling setting, i.e. how to log data from HMI to a database.

6.1.1 Linkage

Start eServer, and click **File > New** or click **New** icon After the **New** dialog box is opened, select **Logging (ODBC)** icon and press **OK** button.

Then, the **ODBC Logging Wizard** will be activated and the following dialog box will appear.

Press **Next** button to continue.

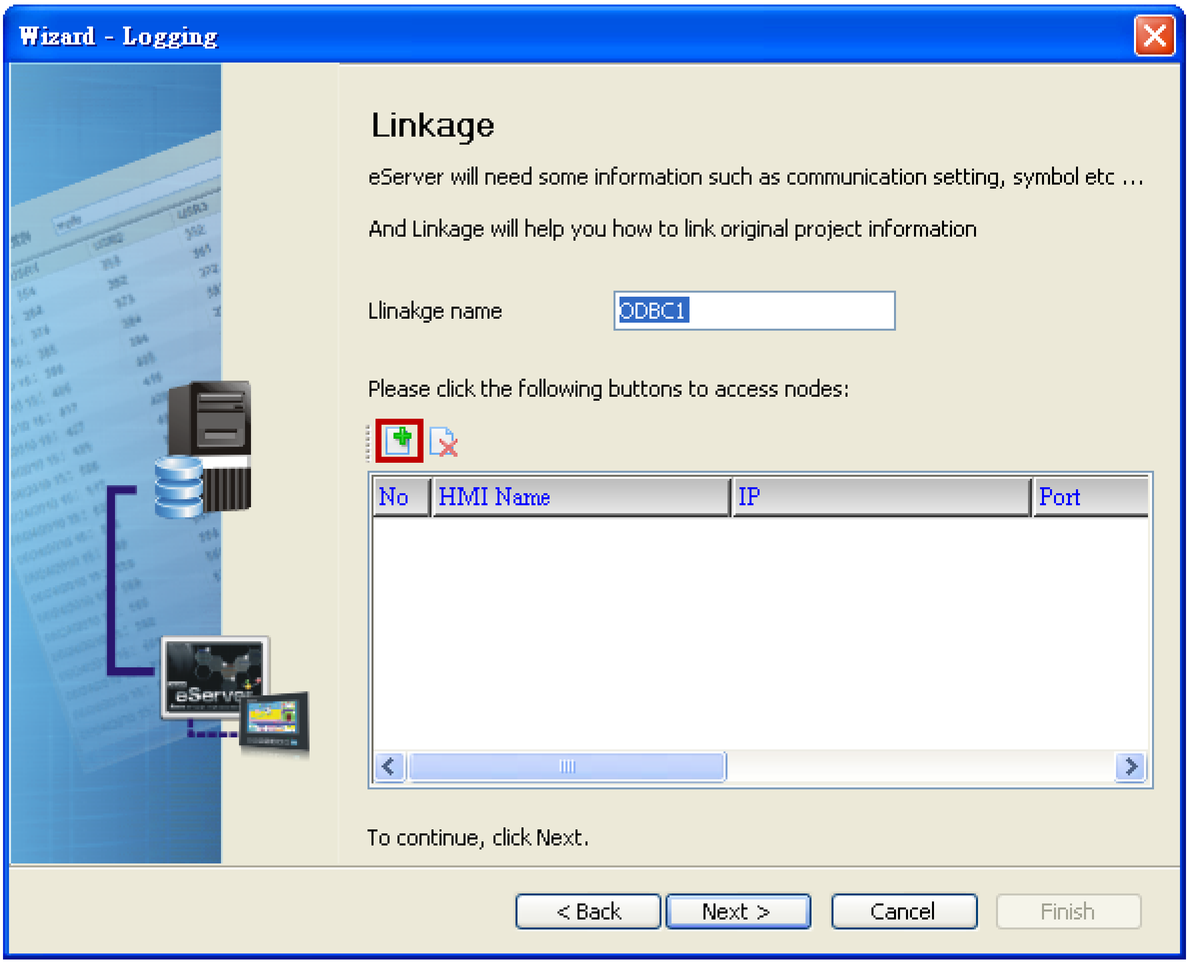


Welcome to the ODBC Logging Wizard

This wizard helps you how to logging data from HMI to Database.

To continue, click Next.

Click **New** icon to access nodes (link to HMI).


Wizard - Logging
eServer
No
HMI Name
IP
Port
< Back
Next >
Cancel
Finish

Linkage

eServer will need some information such as communication setting, symbol etc ...

And Linkage will help you how to link original project information

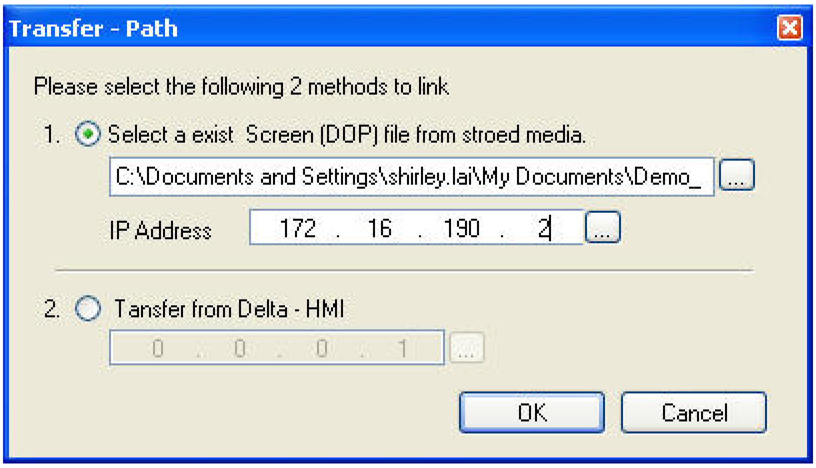
Llinakge name ODBC1

Please click the following buttons to access nodes:

To continue, click Next.

Click ✚ icon to link HMI screen project file. There are two methods available for selection:

1. Select an existing Screen (DOP) file from stored media: Open an existing screen project file and set the IP address of the connecting HMI.


Transfer - Path
...
OK
Cancel

Please select the following 2 methods to link

1. ● Select a exist Screen (DOP) file from stroed media.

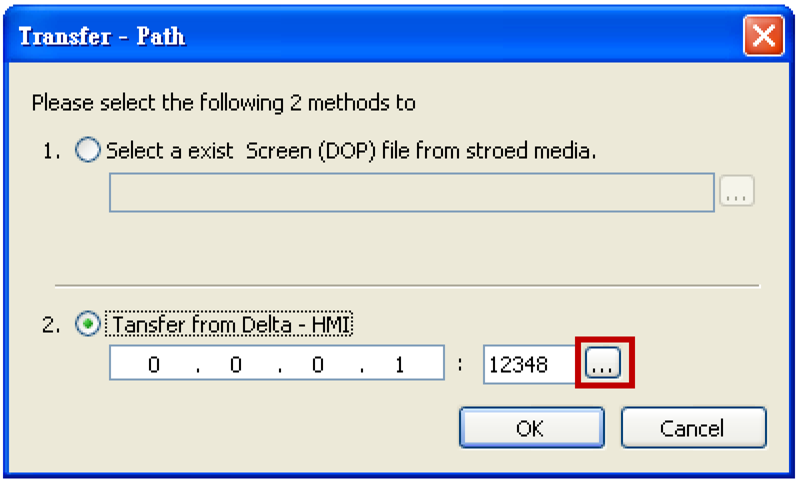
C:\Documents and Settings\shirley.lai\My Documents\Demo_

IP Address 172 . 16 . 190 . 2

2. ○ Tansfer from Delta - HMI

0 . 0 . 0 . 1

2. Transfer from Delta – HMI: Transfer the HMI screen project file via network communication directly.



Transfer - Path

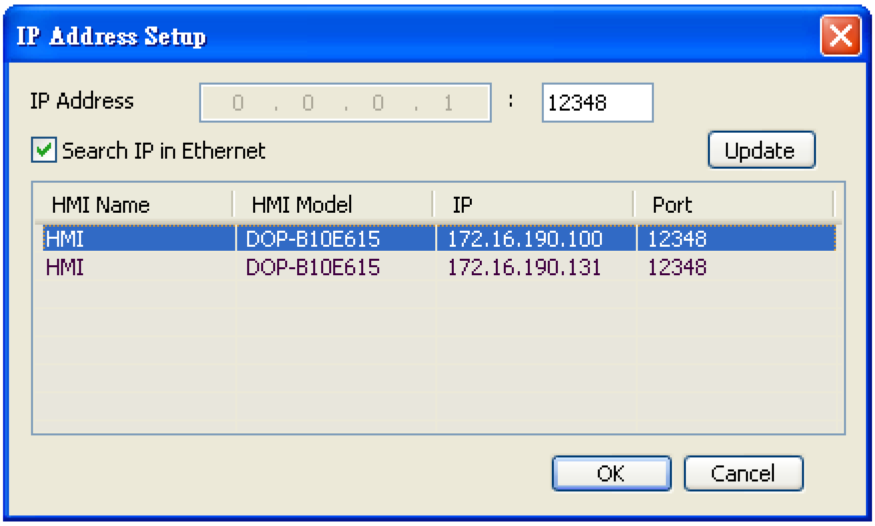
Please select the following 2 methods to

1. ○ Select a exist Screen (DOP) file from stroed media.

2. ● Tansfer from Delta - HMI

0 . 0 . 0 . 1 : 12348

After searching finished, press select wanted HMI then press **OK** button.



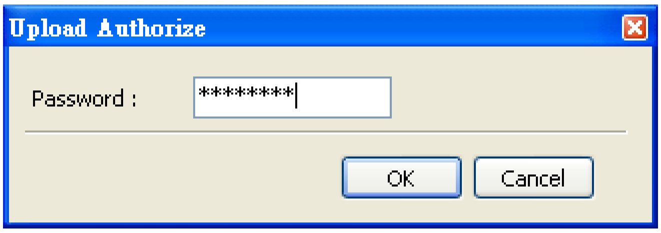
IP Address Setup

IP Address 0 . 0 . 0 . 1 : 12348

☑ Search IP in Ethernet

HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348
HMI	DOP-B10E615	172.16.190.131	12348

eServer will ask user to input authorize password to upload HMI project. The default security password is **12345678**. After input password finished, press **OK**.

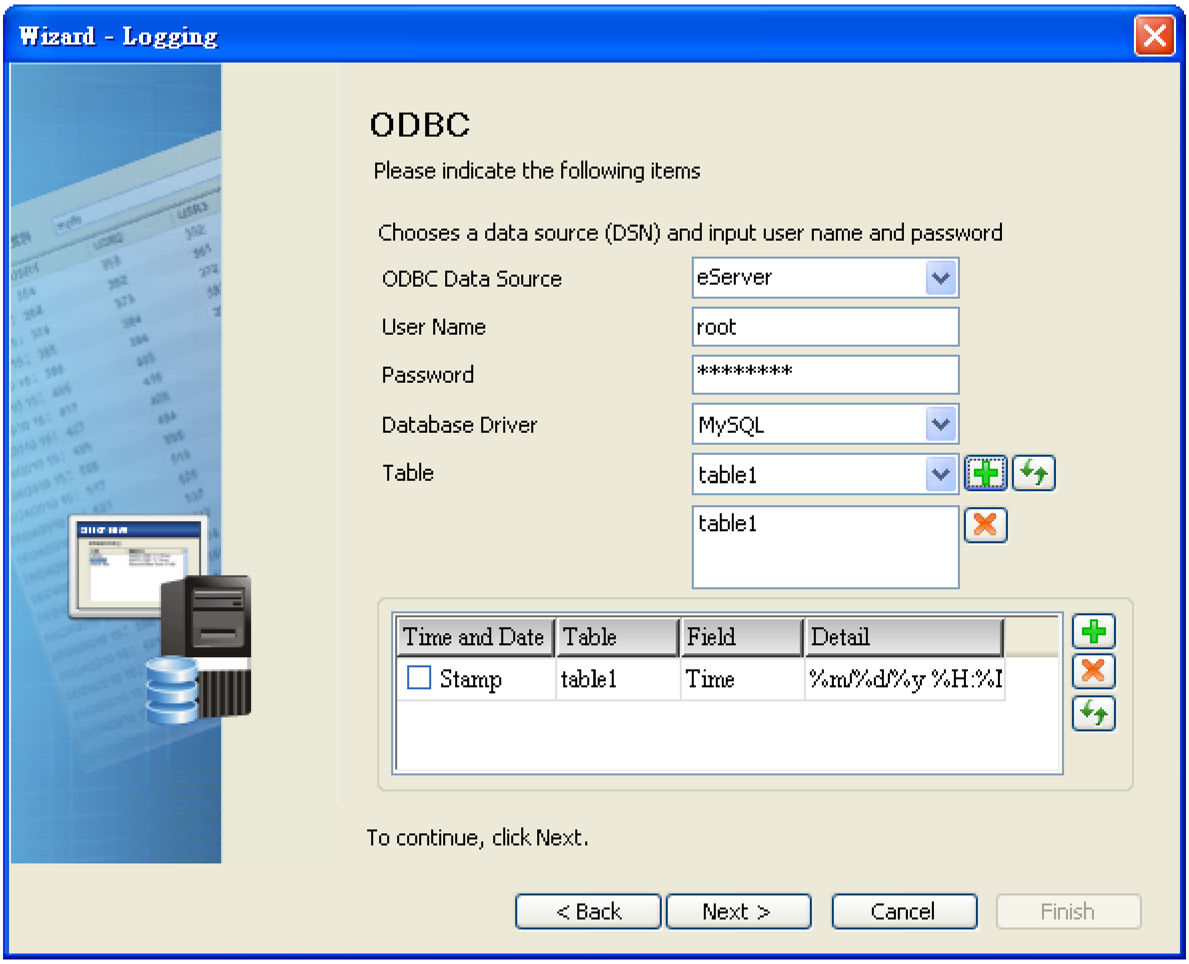


Upload Authorize

Password : ********

6.1.2 ODBC (Open Data Base Connectivity)

This step is used to create an ODBC Data Source pointing to your database.



ODBC

Please indicate the following items

Chooses a data source (DSN) and input user name and password

ODBC Data Source: eServer

User Name: root

Password: *********

Database Driver: MySQL

Table: table1

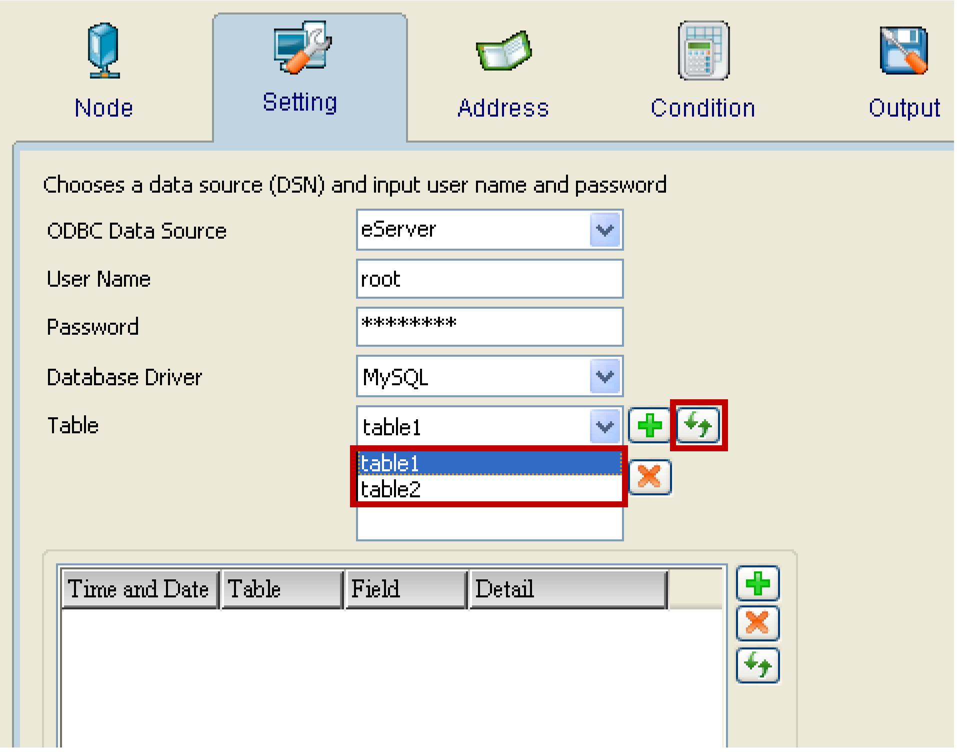
table1

Time and Date	Table	Field	Detail
☐ Stamp	table1	Time	%m/%d/%y %H:%I

To continue, click Next.

Item	Explanation
ODBC Data Source	Name of ODBC Data Source
User Name	Login Username
Password	Login Password
Database Driver	Select wanted connection Database, like MySQL, SQL Server and Oracle.
Table	Name of Sampling Data Table

ODBC sampling setting provide refresh button. This function could help user to select the table after press this refresh button in Wizard setting.

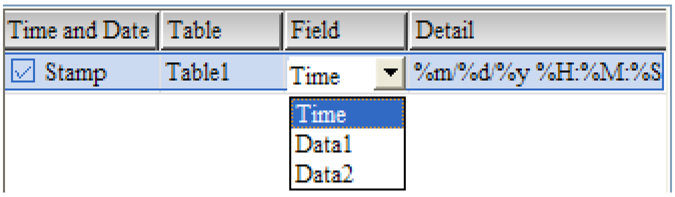

Node
Setting
Address
Condition
Output

Chooses a data source (DSN) and input user name and password

ODBC Data Source: eServer
User Name: root
Password: ********
Database Driver: MySQL
Table: table1

table1
table2
Time and Date
Table
Field
Detail

Time and Data Stamp Function:



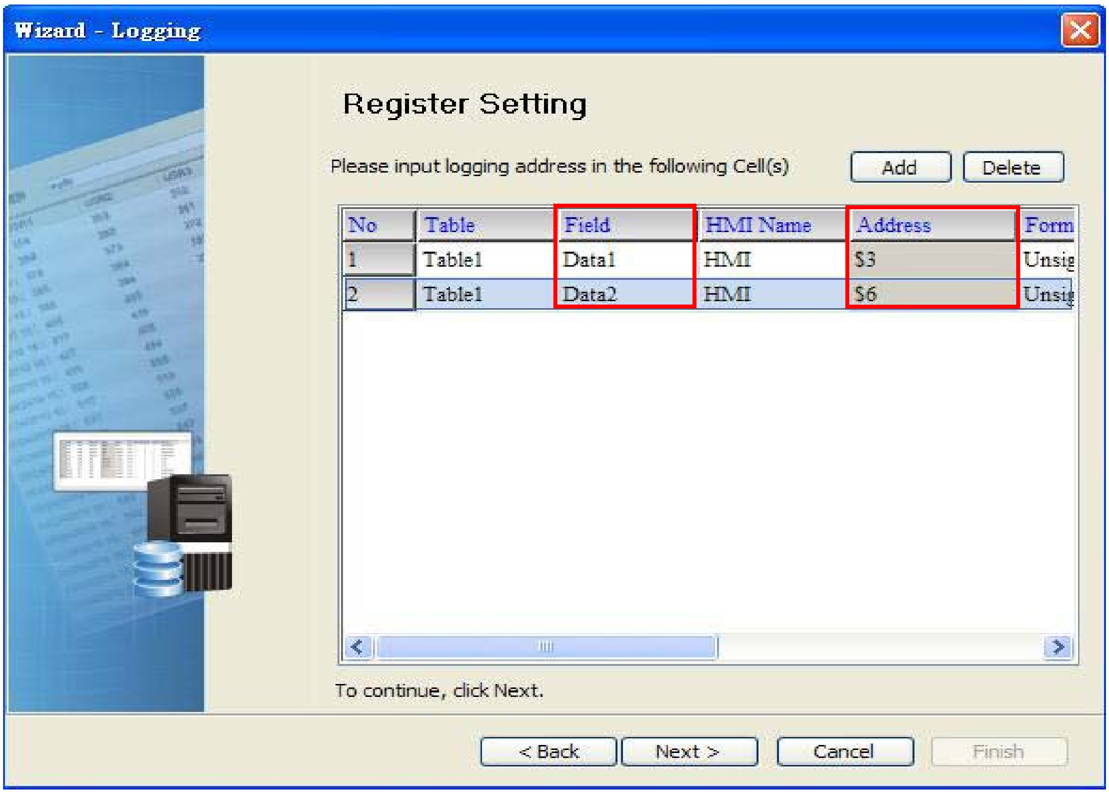
Time and Date	Table	Field	Detail
☑ Stamp	Table1	Time	%m/%d/%y %H:%M:%S

Time
Data1
Data2

<table>
<tr><th>Item</th><th>Explanation</th></tr>
<tr><td>Time and Date</td><td>Choose if Time and Date Stamp function is enabled.</td></tr>
<tr><td>Table</td><td>Table which the time and date will be written.</td></tr>
<tr><td>Field</td><td>Field which the time and date will be written.</td></tr>
<tr><td>Detail</td><td>The format of the date and time is specified by a string of characters which can be user-defined and changed freely. Please refer to the table below for the string representation.
<table>
<tr><th>String Format</th><th>Representation</th></tr>
<tr><td>%m</td><td>Month</td></tr>
<tr><td>%d</td><td>Date</td></tr>
<tr><td>%y</td><td>Year</td></tr>
<tr><td>%H</td><td>Hour</td></tr>
<tr><td>%M</td><td>Minute</td></tr>
<tr><td>%S</td><td>Second</td></tr>
</table></td></tr>
</table>

6.1.3 Register Setting

This step is used to set the register address of the sampling data.



Register Setting

Please input logging address in the following Cell(s)

No	Table	Field	HMI Name	Address	Form
1	Table1	Data1	HMI	$3	Unsig
2	Table1	Data2	HMI	$6	Unsig

To continue, click Next.

Setting Item	Description	Remark
Table	Table which the sampling data will be written	
Field	Field which the sampling data will be written	
HMI Name	Name of connecting HMI	
Address	Register Address	
Format	1. When the register address is set to Bit, this data format setting will be disabled. 2. When the register address is set to Word, this data format setting will be enabled and the available settings include: BCD, Signed, Unsigned, Hex, Floating, Char (Character)	
Unit	Unit of the data length of the register	Unchangeable
Read Count	1. When the register address is set to Bit, this setting will be 1(one) always. 2. When the register address is set to Word, if the data format is set to BCD, Signed, Unsigned, Hex, and Floating, the setting value of this field could not exceed 2(two). 3. When the register address is set to Word, if the data format is set to Char (Character), the setting value of this field could be user-defined and the max. setting value could be set to 100(hundred).	

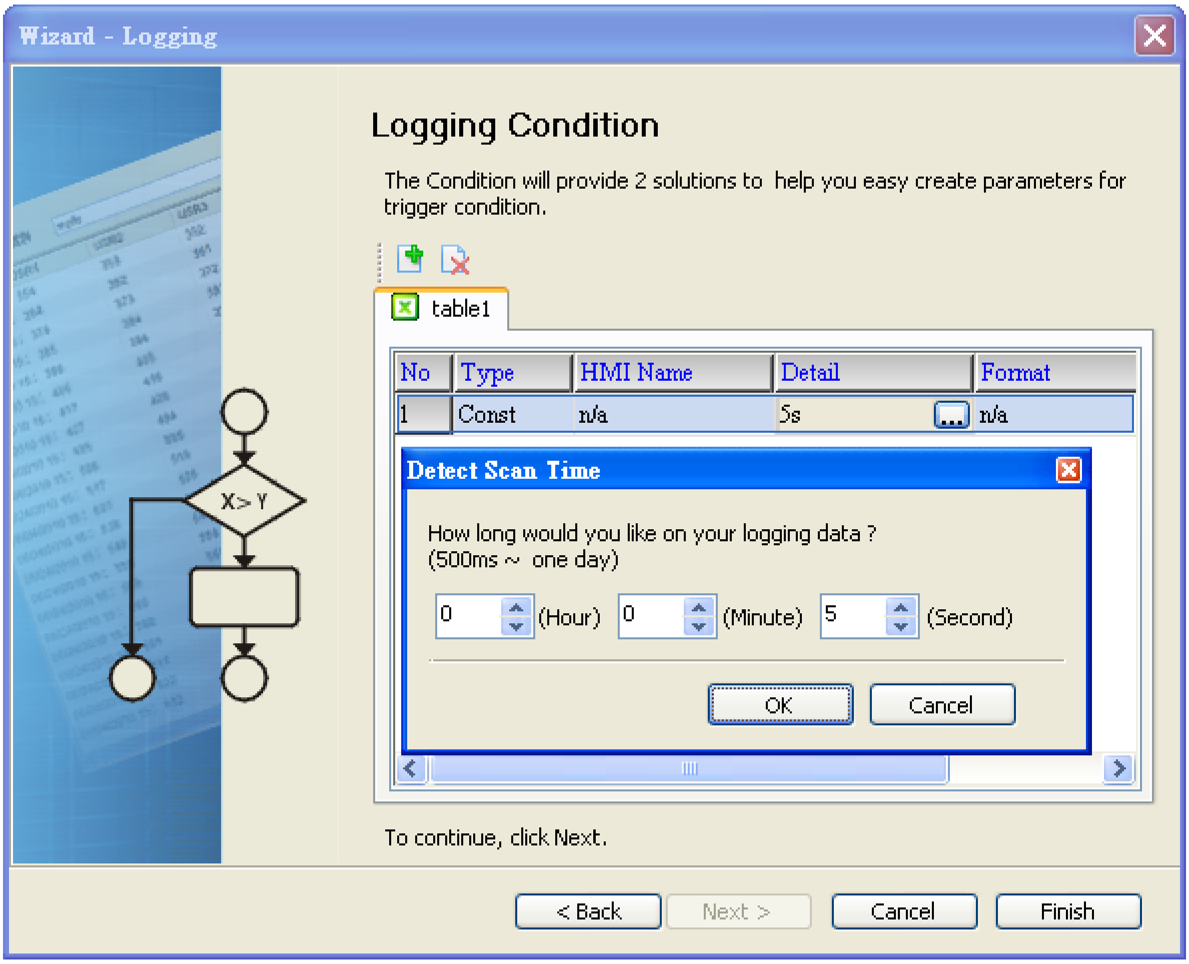
Setting Item	Description	Remark
Integer	1. If the register address is set to Bit, this integer setting cannot be set. 2. If the register address is set to Word, except Floating and Char(Character), when the other format is selected, this integer setting can be set. 3. When Read Count is 2, Format is floating, it can be set Integer.	
Fraction	1. If the register address is set to Bit, this fraction setting cannot be set. 2. If the register address is set to Word, except Floating and Char(Character), when the other format is selected, this fraction setting can be set. 3. When Read Count is 2, Format is floating, it can be set Fraction.	
Controller	Connecting controller	Unchangeable

6.1.4 Sampling Conditions

This step is used to set the sampling conditions. There are two kinds of options for selection:

1. Const (execute sampling repeatedly in a certain span of time)

   This option is used to determine how long the sampling process is repeated. The time unit can be defined as ms, second, minute or hour.



Wizard - Logging

Logging Condition

The Condition will provide 2 solutions to help you easy create parameters for trigger condition.

table1

No	Type	HMI Name	Detail	Format
1	Const	n/a	5s	n/a

Detect Scan Time

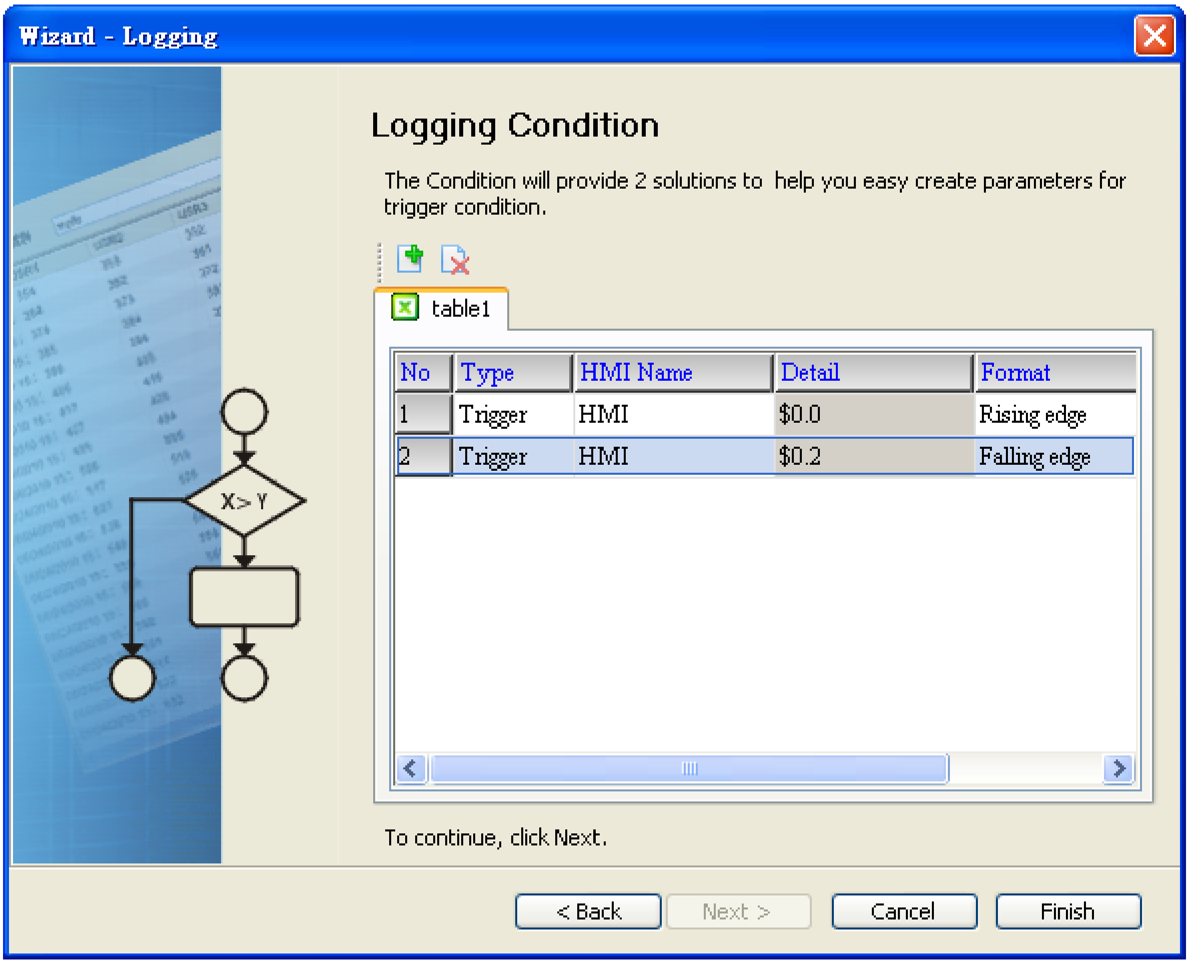
How long would you like on your logging data ?
(500ms ~ one day)

0 (Hour) 0 (Minute) 5 (Second)

To continue, click Next.

2. Trigger (Execute sampling when the trigger conditions are satisfied)

   This option is used to determine how long the sampling process is repeated when the trigger conditions are met. The detailed settings are described as follows:



Logging Condition

The Condition will provide 2 solutions to help you easy create parameters for trigger condition.

table1

No	Type	HMI Name	Detail	Format
1	Trigger	HMI	$0.0	Rising edge
2	Trigger	HMI	$0.2	Falling edge

To continue, click Next.

Polling Cycle (Sampling Cycle): It is used to determine how long the sampling process is repeated. The time unit is ms.

Logging Condition:

Setting Item	Description	Remark
No.	Condition number	Unchangeable
Type	Sampling type. There are two kinds of options for selection: Const and Trigger. Const: Execute sampling repeatedly in a certain span of time. Trigger: Execute sampling when the trigger conditions are satisfied.	
HMI Name	Name of connecting HMI	
Detail	Register Address	
Format	1. When the register address is set to Bit, the selectable options are: A. Rising edge: Triggered by rising-edge B. Falling edge Triggered by falling-edge	
Controller	Connecting controller	Unchangeable

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Chapter 7 Writing Data in Microsoft Access 2003 at XP Operating System

Before creating testing example, make sure to change the upload and download option (**Options > Environment**) on DOPSoft first. The default setting of upload and download is via **USB**. If the users need to use **Ethernet**, please change the default setting by referring to **Appendix A**.

7.1 Example

This example is used to help the users to understand how to use eServer to read the data of the register addresses $3 and $6 every second, record the data in Microsoft Access database via ODBC interface, and save the collected data into the specified folder (C:\Data).

7.1.1 Database Setting

1. Installing MSDE

First download the free software MSDE from the Microsoft web site. To download it, go to http://www.microsoft.com/downloads/details.aspx?familyid=413744d1-a0bc-479f-bafa-e4b278eb9147&displaylang=zh-tw#filelist and a download link will redirect the users to download it.

After running the self-extracting file, open **setup.ini** file within MSDE subdirectory for editing.

In the **setup.ini** file under the **[Options]** tag insert:

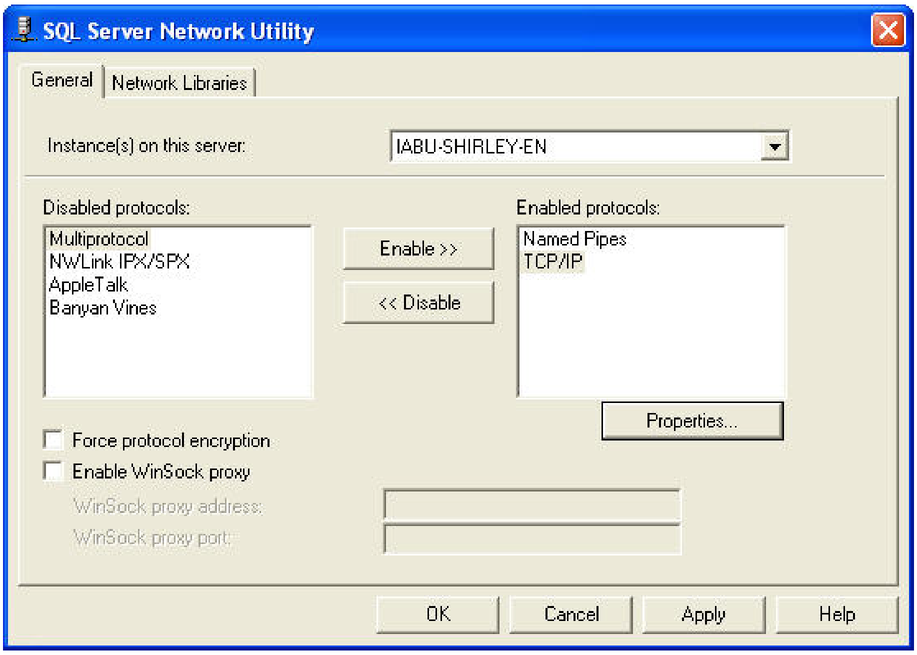
SAPWD=”0000”

SECURITYMODE=”SQL”

The SAPWD is the password required for the system administrator (SA) login account. In this case, the SA login password is set to **0000**. The users can set the desired password freely. Once the setup.ini file is saved, double-click setup.exe to complete MSDE installation.

2. Enabling MSDE

Execute **SVRNETCN.exe** ( ) within C:\Program Files\Microsoft SQL Server\80\Tools\Binn subdirectory and enable **Named Pipes** and **TCP/IP** options.


SQL Server Network Utility

Instance(s) on this server: IABU-SHIRLEY-EN

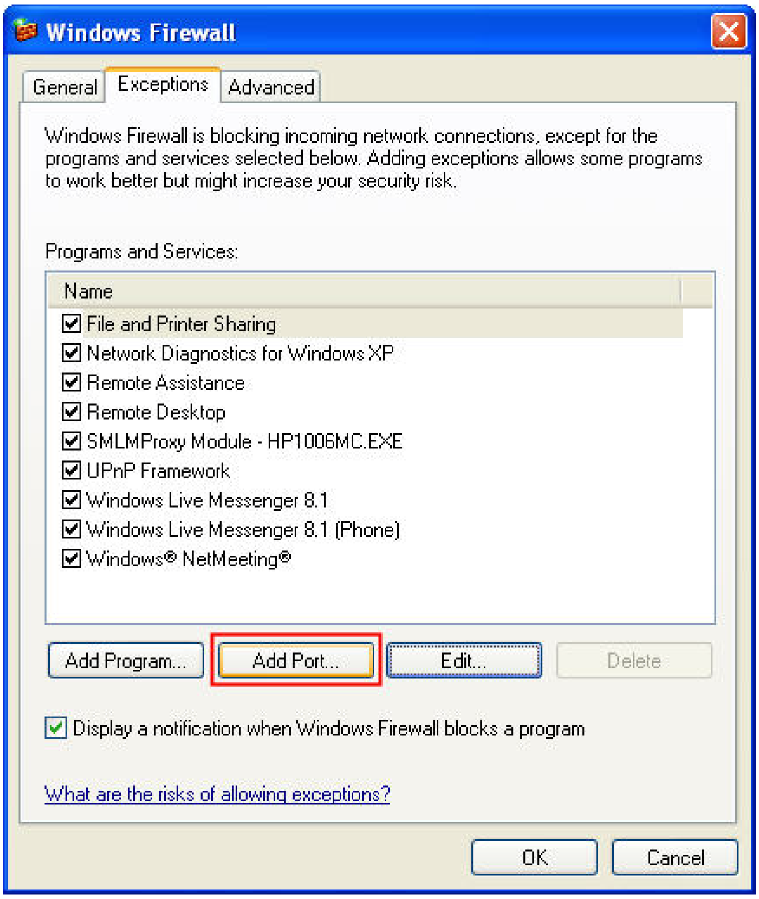
Disabled protocols:
Multiprotocol
NWLink IPX/SPX
AppleTalk
Banyan Vines

Enabled protocols:
Named Pipes
TCP/IP

☐ Force protocol encryption
☐ Enable WinSock proxy
General
Network Libraries
Enable >>
<< Disable
Properties...
WinSock proxy address:
WinSock proxy port:
OK
Cancel
Apply
Help

3. Setting Windows Firewall

Click **Start** and then click **Control Panel**. In the **Control Panel**, click **Windows Security Center > Windows Firewall**. Then, click on the **Exceptions** tab.


Windows Firewall

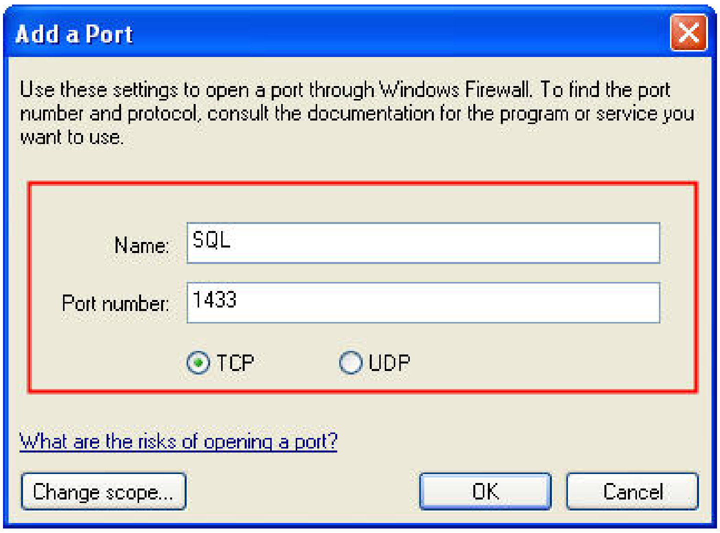
Windows Firewall is blocking incoming network connections, except for the programs and services selected below. Adding exceptions allows some programs to work better but might increase your security risk.

Programs and Services:

Name
☑ File and Printer Sharing
☑ Network Diagnostics for Windows XP
☑ Remote Assistance
☑ Remote Desktop
☑ SMLMProxy Module - HP1006MC.EXE
☑ UPnP Framework
☑ Windows Live Messenger 8.1
☑ Windows Live Messenger 8.1 (Phone)
☑ Windows® NetMeeting®

☑ Display a notification when Windows Firewall blocks a program
General
Exceptions
Advanced
Add Program...
Add Port...
Edit...
Delete
What are the risks of allowing exceptions?
OK
Cancel

Click **Add Port** button and the following **Add a Port** dialog box will appear.



Use these settings to open a port through Windows Firewall. To find the port number and protocol, consult the documentation for the program or service you want to use.

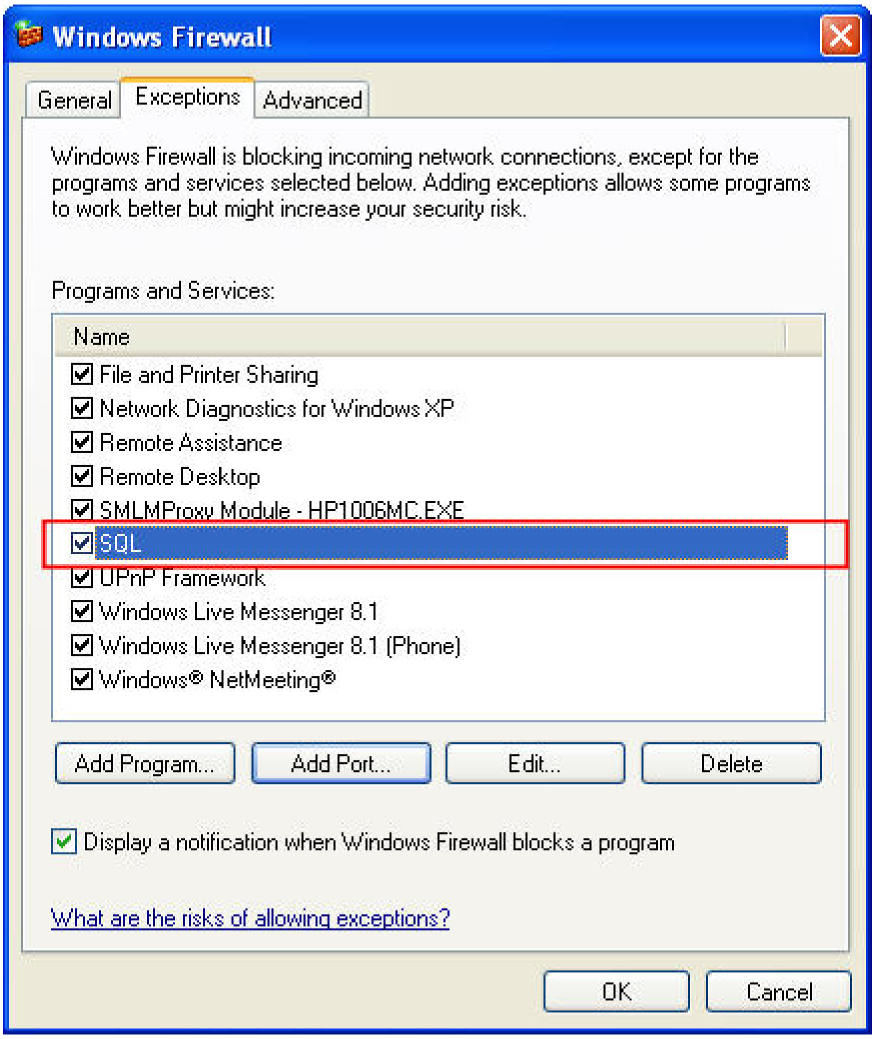
Name: SQL

Port number: 1433

● TCP ○ UDP

What are the risks of opening a port?

In the Add a Port dialog box, type SQL in the Name text field and type the port number of the instance of the Database Engine, such as 1433 for the default instance in the Port number text field. Ensure that TCP is selected and click OK to complete the settings. When SQL port is shown and selected in Windows Firewall dialog box, it indicates that SQL Server port will not be blocked and the incoming connections to SQL Server will be allowed.



Windows Firewall is blocking incoming network connections, except for the programs and services selected below. Adding exceptions allows some programs to work better but might increase your security risk.

Programs and Services:

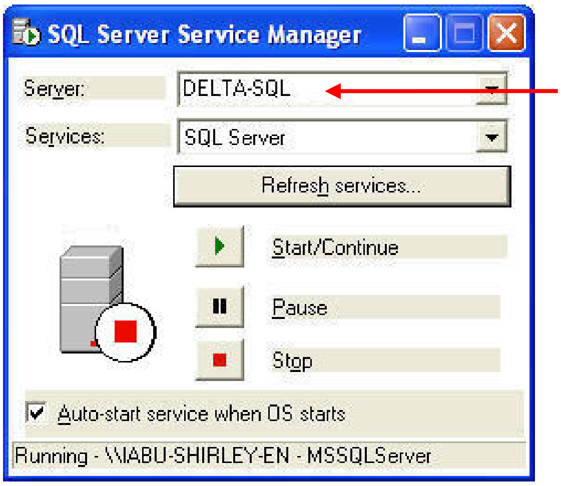
Name
- ☑ File and Printer Sharing
- ☑ Network Diagnostics for Windows XP
- ☑ Remote Assistance
- ☑ Remote Desktop
- ☑ SMLMProxy Module - HP1006MC.EXE
- ☑ SQL
- ☑ UPnP Framework
- ☑ Windows Live Messenger 8.1
- ☑ Windows Live Messenger 8.1 (Phone)
- ☑ Windows® NetMeeting®

☑ Display a notification when Windows Firewall blocks a program

What are the risks of allowing exceptions?

4. Activating SQL Server

Double-click the located at the bottom right of Windows screen to open the following **SQL Server Service Manager** dialog box and click **Start/Continue** button.


SQL Server Service Manager
Refresh services...
Start/Continue
Pause
Stop

Server: DELTA-SQL

Services: SQL Server

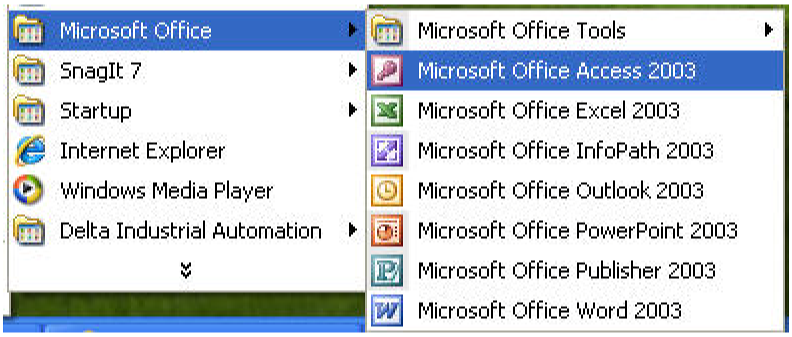
☑ Auto-start service when OS starts

Running - \\IABU-SHIRLEY-EN - MSSQLServer

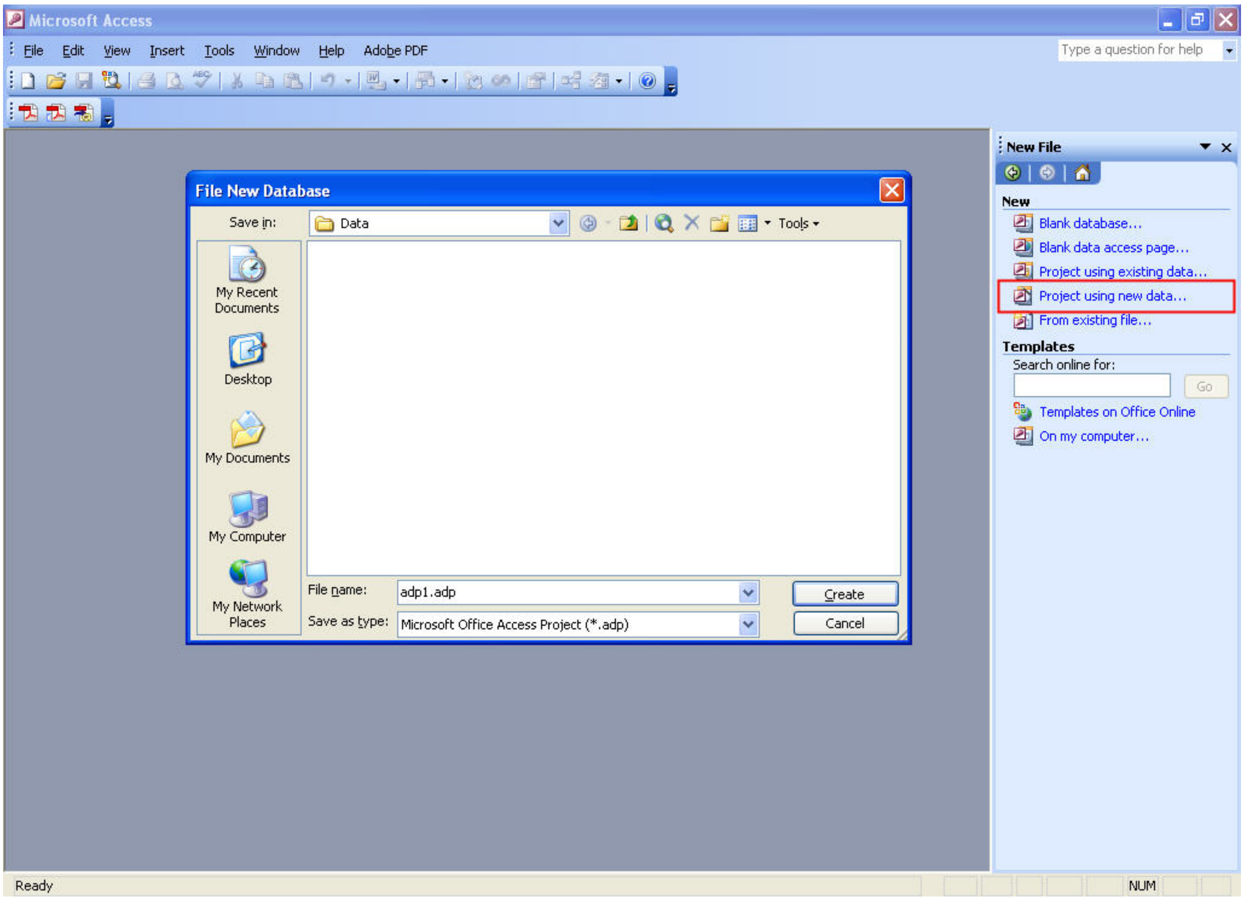
Name of SQL Server

5. Starting Microsoft Access

Start Microsoft Access by clicking **Start > Programs > Microsoft Office > Microsoft Office Access**.


Microsoft Office
SnagIt 7
Startup
Internet Explorer
Windows Media Player
Delta Industrial Automation
Microsoft Office Tools
Microsoft Office Access 2003
Microsoft Office Excel 2003
Microsoft Office InfoPath 2003
Microsoft Office Outlook 2003
Microsoft Office PowerPoint 2003
Microsoft Office Publisher 2003
Microsoft Office Word 2003

Then, click **New** icon and choose **Project using new data** to open a new database file and set the directory to C:\Data.

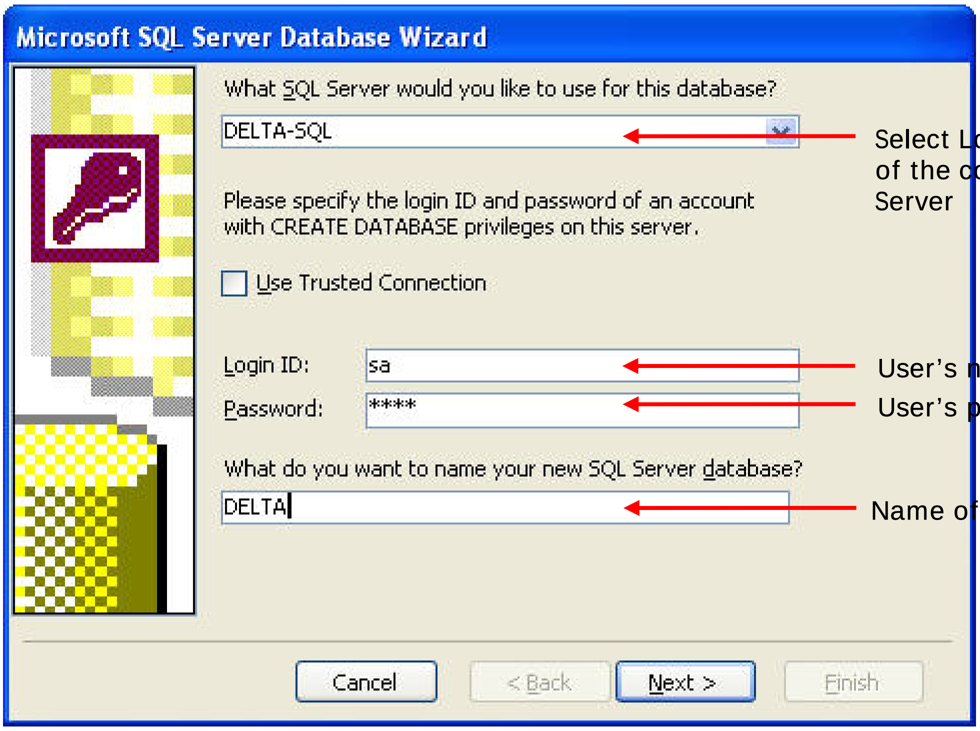

Microsoft Access
File Edit View Insert Tools Window Help Adobe PDF
Type a question for help
File New Database
My Recent Documents
Desktop
My Documents
My Computer
My Network Places
Create
Cancel
Tools
New File
New
Blank database…
Blank data access page…
Project using existing data…
Project using new data…
From existing file…
Templates
Search online for:
Go
Templates on Office Online
On my computer…
Ready
NUM

Save in: Data

File name: adp1.adp

Save as type: Microsoft Office Access Project (*.adp)

Press **Create** button to enable Microsoft SQL Server Database Wizard.


Microsoft SQL Server Database Wizard
Cancel
< Back
Next >
Finish

What SQL Server would you like to use for this database?

DELTA-SQL

Please specify the login ID and password of an account with CREATE DATABASE privileges on this server.

☐ Use Trusted Connection

Login ID: sa

Password: ****

What do you want to name your new SQL Server database?

DELTA

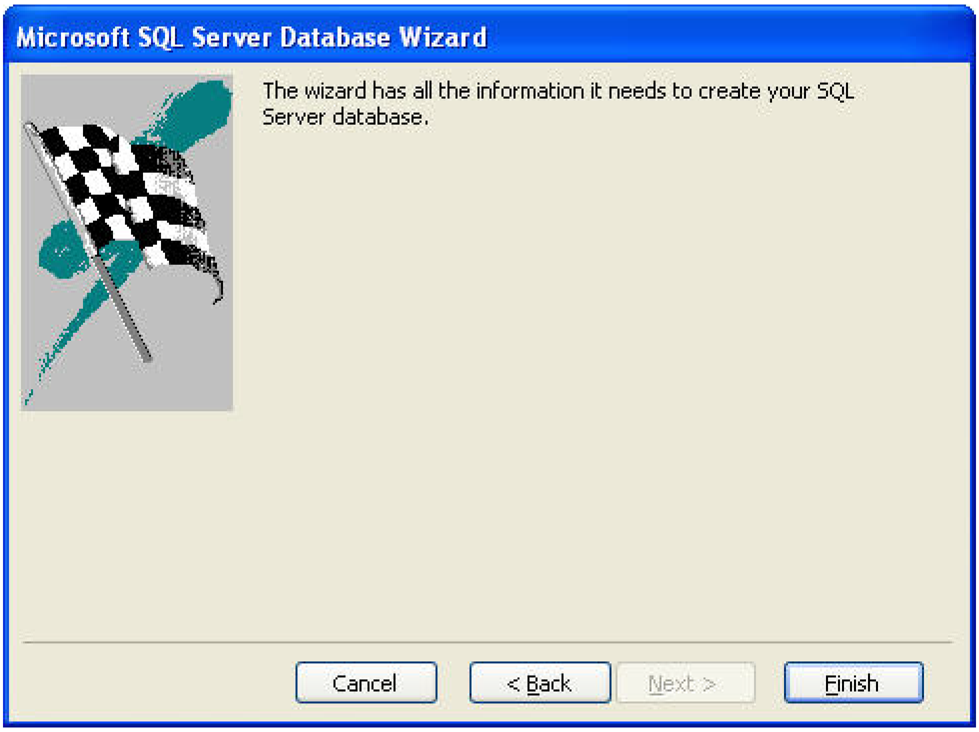
Select Local or the name of the connecting SQL Server

User's name: sa

User's password: 0000

Name of database: DELTA

Press **Next** button to continue.

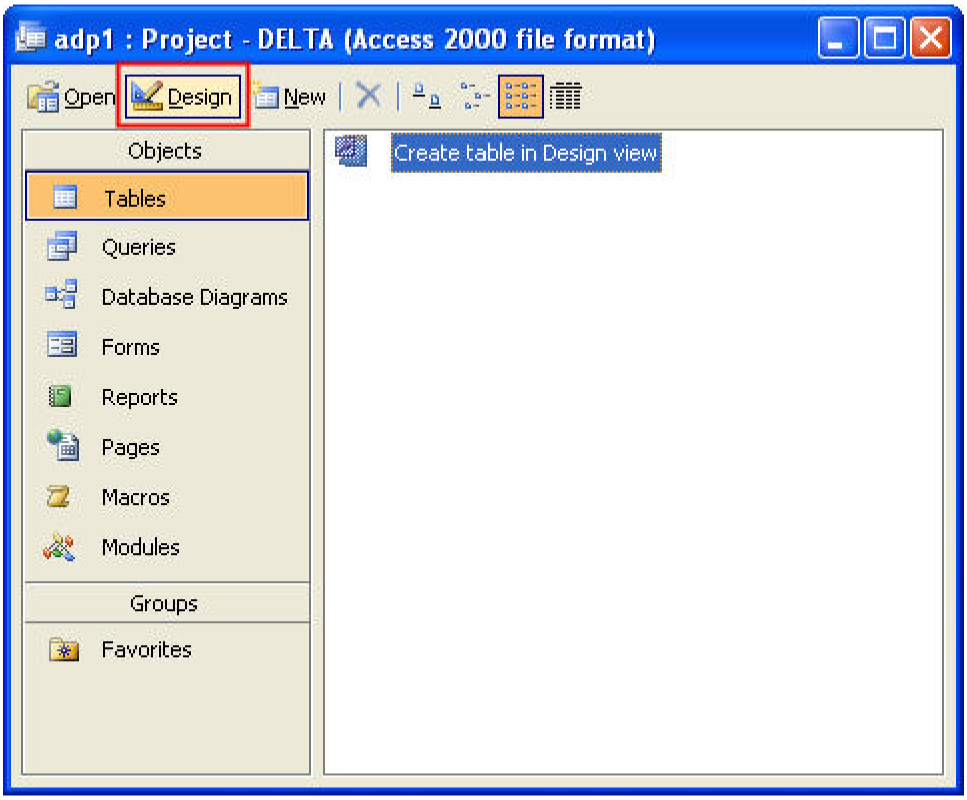


Microsoft SQL Server Database Wizard
Cancel
< Back
Next >
Finish

The wizard has all the information it needs to create your SQL Server database.

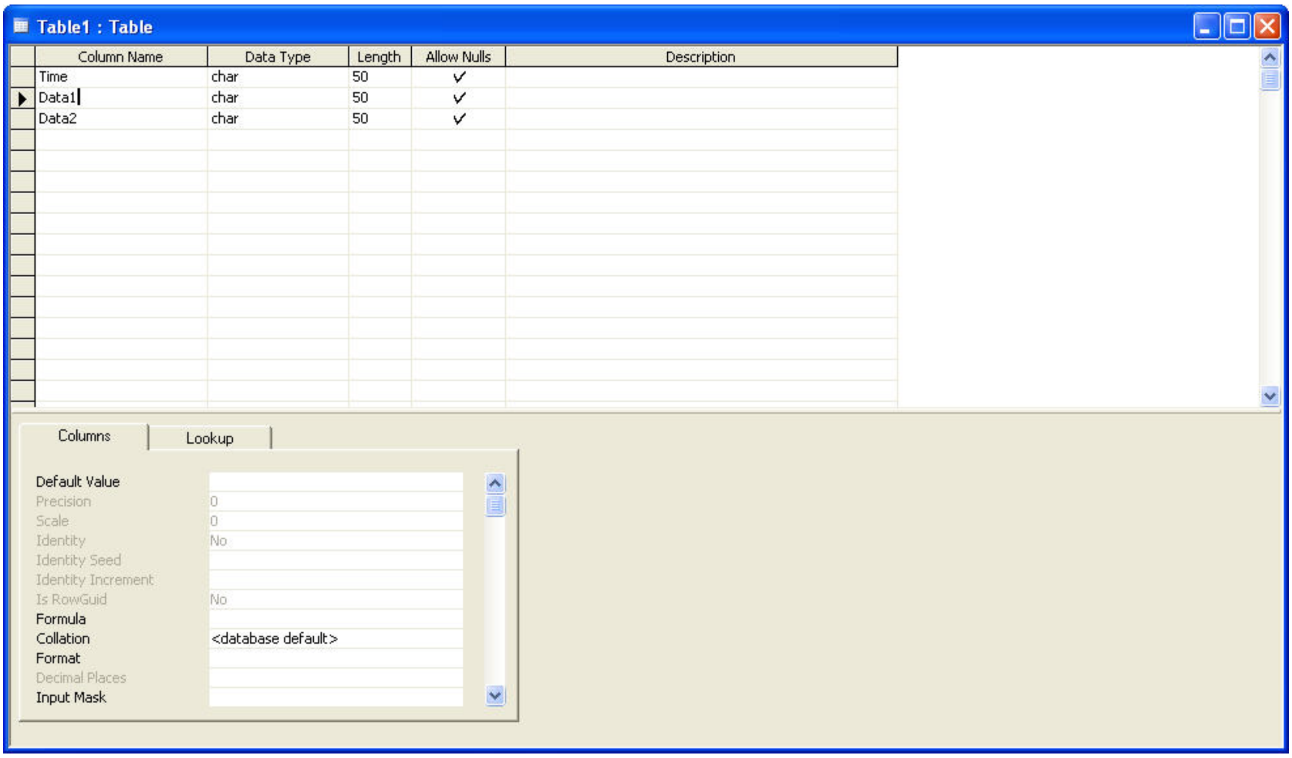
Press **Finish** button to complete the settings.

Then, click **Design** in the following pop-up window to create a database table in Design view.



adp1 : Project - DELTA (Access 2000 file format)
Open
Design
New
Objects
Tables
Queries
Database Diagrams
Forms
Reports
Pages
Macros
Modules
Groups
Favorites
Create table in Design view

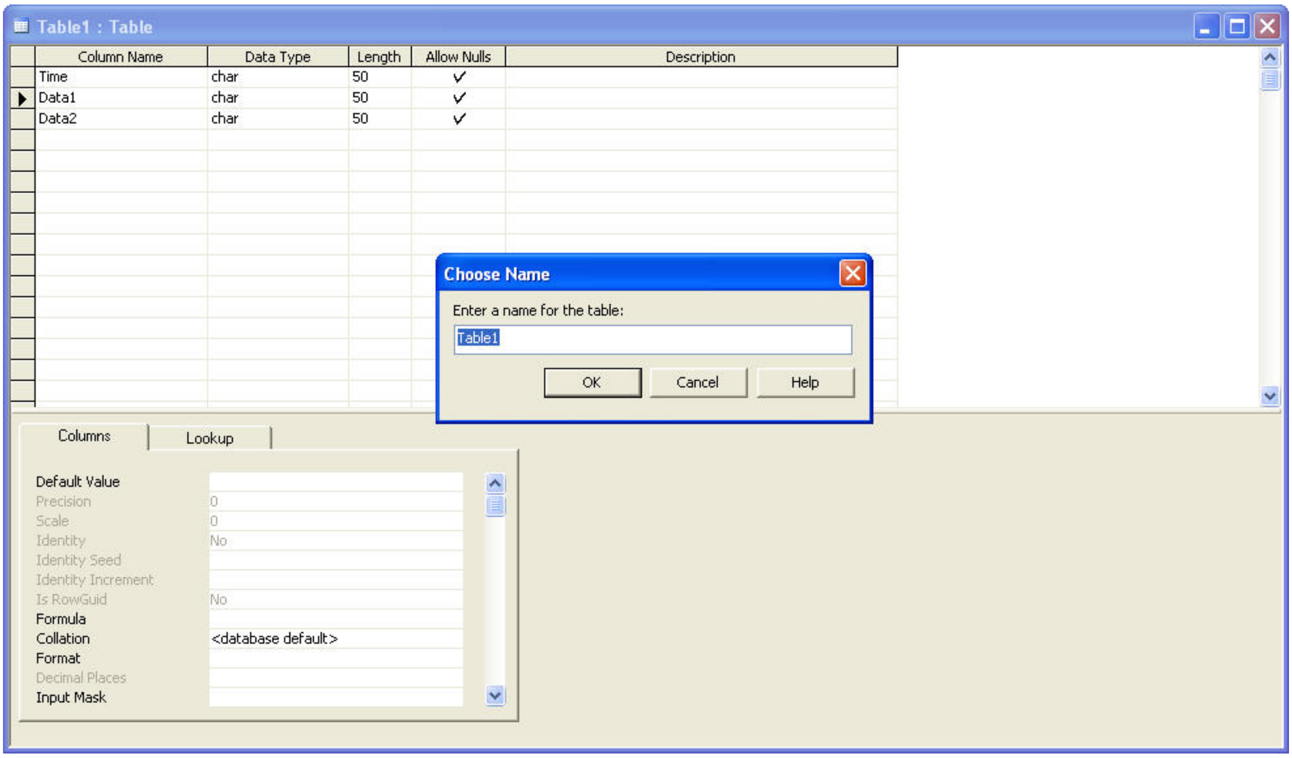
In the Table dialog box, create a database like the following figure shown below.



Column Name	Data Type	Length	Allow Nulls	Description
Time	char	50	✓	
Data1	char	50	✓	
Data2	char	50	✓	

Default Value	
Precision	0
Scale	0
Identity	No
Identity Seed	
Identity Increment	
Is RowGuid	No
Formula	
Collation	<database default>
Format	
Decimal Places	
Input Mask	

After editing the table, close the window to give a name for this table such as Table 1.



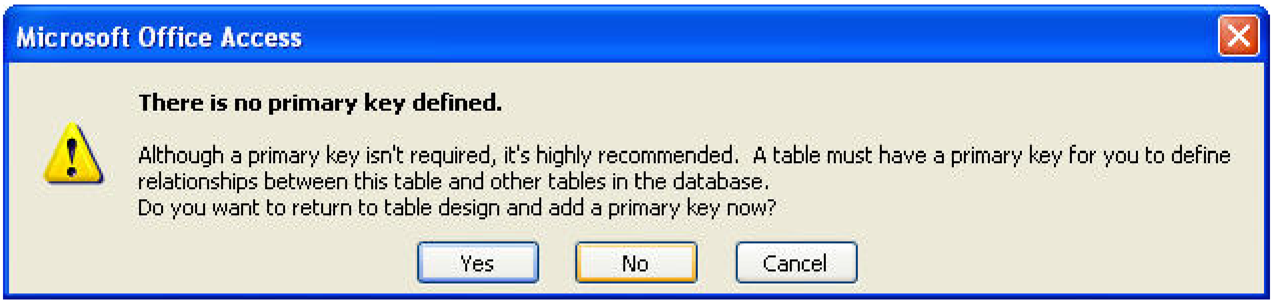
Column Name	Data Type	Length	Allow Nulls	Description
Time	char	50	✓	
Data1	char	50	✓	
Data2	char	50	✓	

Default Value	
Precision	0
Scale	0
Identity	No
Identity Seed	
Identity Increment	
Is RowGuid	No
Formula	
Collation	<database default>
Format	
Decimal Places	
Input Mask	

Enter a name for the table: Table1

Click **OK** button, and the following warning dialog will pop-up.

Please press **No** button to complete the settings.



Microsoft Office Access

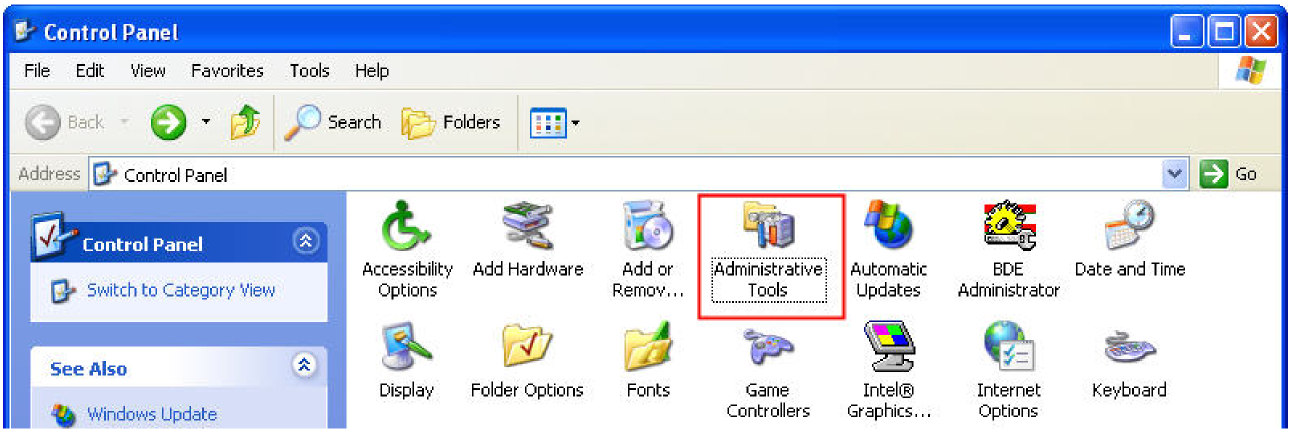
There is no primary key defined.

Although a primary key isn't required, it's highly recommended. A table must have a primary key for you to define relationships between this table and other tables in the database.
Do you want to return to table design and add a primary key now?

Yes
No
Cancel

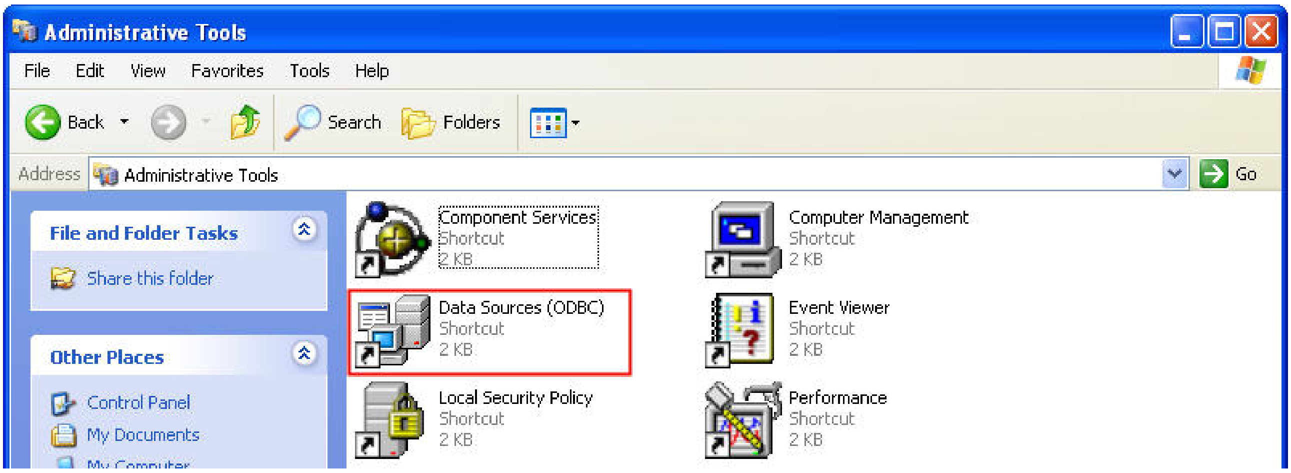
6. ODBC Setup

In the **Control Panel**, double-click **Administrative Tools**.



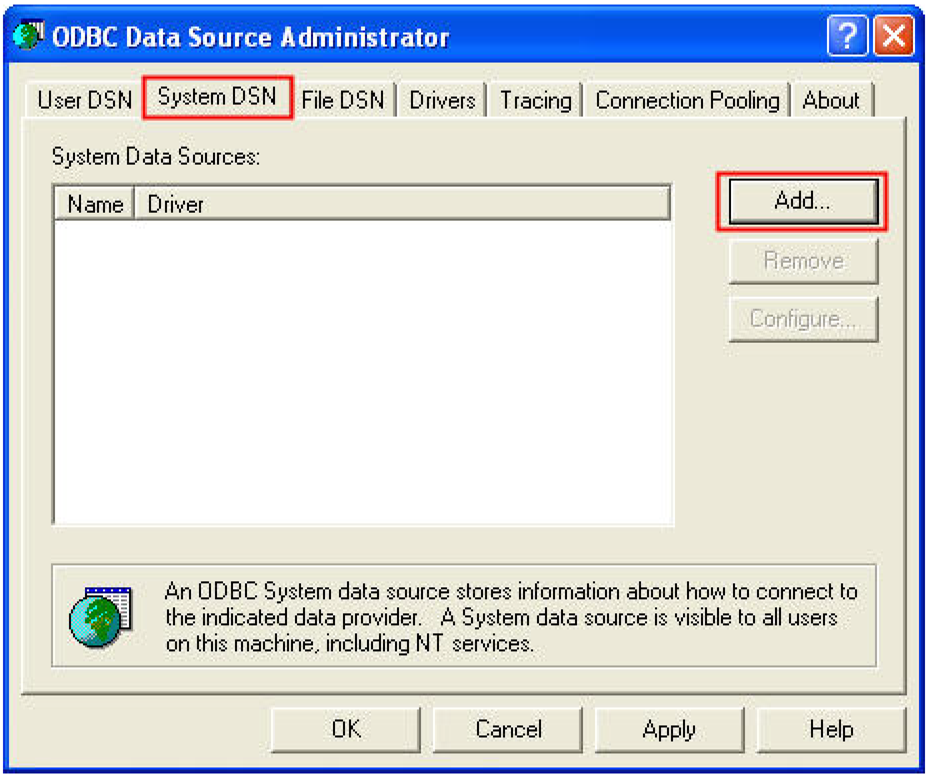
Control Panel
File Edit View Favorites Tools Help
Back Search Folders
Address Control Panel Go
Control Panel
Switch to Category View
See Also
Windows Update
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Automatic Updates
BDE Administrator
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel® Graphics...
Internet Options
Keyboard

In the **Administrative Tools**, double-click **Data Sources (ODBC)**.



Administrative Tools
File Edit View Favorites Tools Help
Back Search Folders
Address Administrative Tools Go
File and Folder Tasks
Share this folder
Other Places
Control Panel
My Documents
My Computer
Component Services Shortcut 2 KB
Computer Management Shortcut 2 KB
Data Sources (ODBC) Shortcut 2 KB
Event Viewer Shortcut 2 KB
Local Security Policy Shortcut 2 KB
Performance Shortcut 2 KB

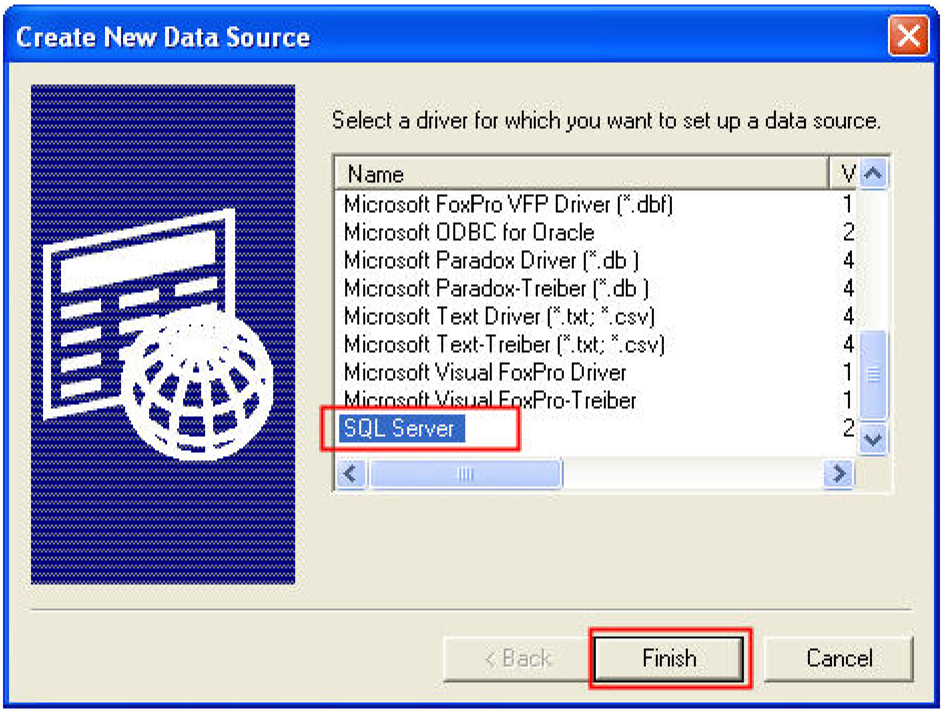
In the **ODBC Data Source Administrator** dialog box, select **System DSN** tab and click on **Add** button to add system data source.



ODBC Data Source Administrator
User DSN
System DSN
File DSN
Drivers
Tracing
Connection Pooling
About
System Data Sources:
Name
Driver
Add...
Remove
Configure...
OK
Cancel
Apply
Help

An ODBC System data source stores information about how to connect to the indicated data provider. A System data source is visible to all users on this machine, including NT services.

Select **SQL Server** and then click on **Finish** button.



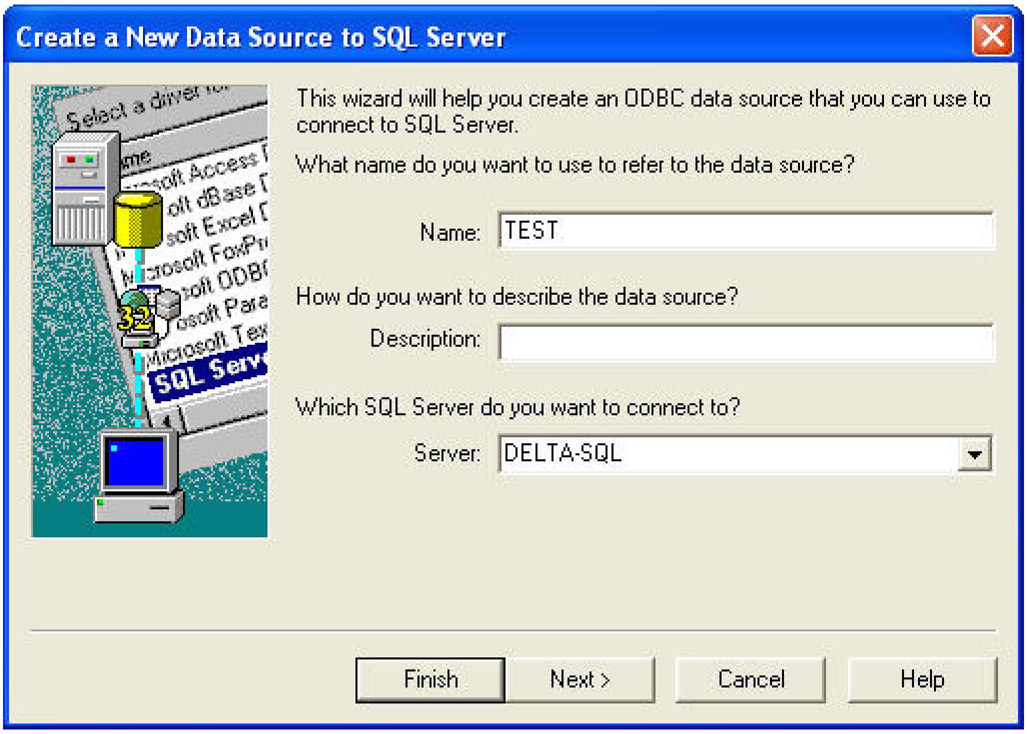
Create New Data Source
< Back
Finish
Cancel

Select a driver for which you want to set up a data source.

Name	V
Microsoft FoxPro VFP Driver (*.dbf)	1
Microsoft ODBC for Oracle	2
Microsoft Paradox Driver (*.db)	4
Microsoft Paradox-Treiber (*.db)	4
Microsoft Text Driver (*.txt; *.csv)	4
Microsoft Text-Treiber (*.txt; *.csv)	4
Microsoft Visual FoxPro Driver	1
Microsoft Visual FoxPro-Treiber	1
SQL Server	2

In the Create a New Data Source to SQL Server dialog box, do the following:

Enter the name of the data source and select the SQL Server that the users want to access.



Create a New Data Source to SQL Server

This wizard will help you create an ODBC data source that you can use to connect to SQL Server.

What name do you want to use to refer to the data source?

Name: TEST

How do you want to describe the data source?

Description:

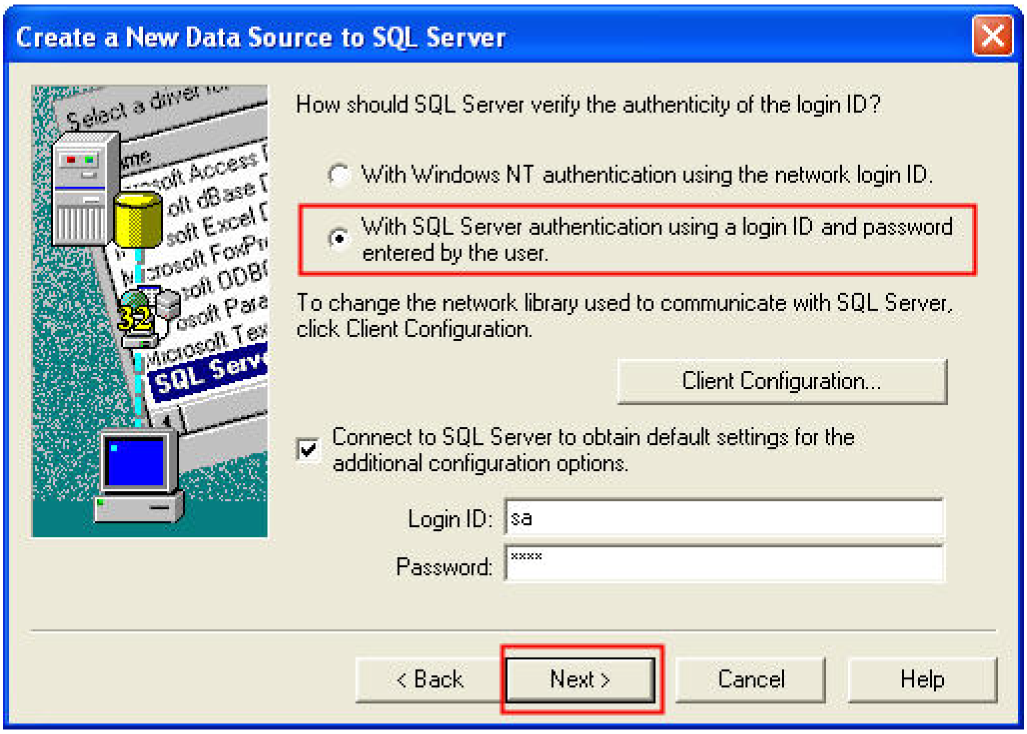
Which SQL Server do you want to connect to?

Server: DELTA-SQL

Press **Next** button to continue.

Choose how SQL Server should verify the authenticity of the login ID. Enter the user's name and the password. In this case, the user's name is **sa** and the password is **0000**.

Press **Next** button to continue.



Create a New Data Source to SQL Server

How should SQL Server verify the authenticity of the login ID?

○ With Windows NT authentication using the network login ID.

● With SQL Server authentication using a login ID and password entered by the user.

To change the network library used to communicate with SQL Server, click Client Configuration.

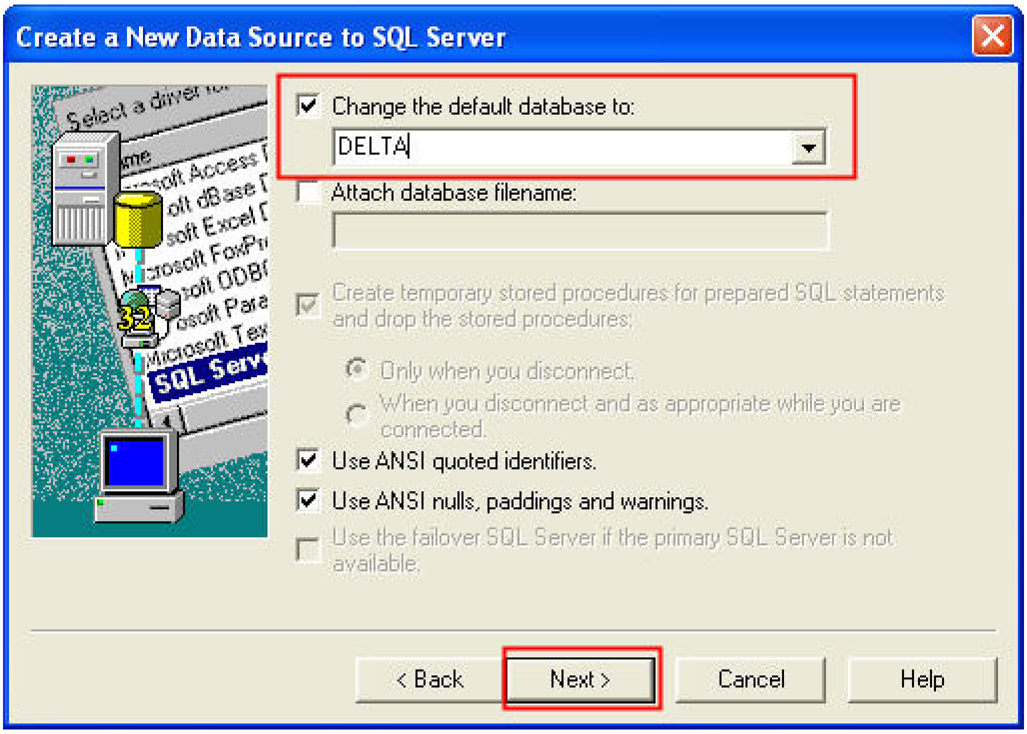
☑ Connect to SQL Server to obtain default settings for the additional configuration options.

Login ID: sa

Password: ****

Change the default database to **DELTA**.

Press **Next** button to continue.



Create a New Data Source to SQL Server

☑ Change the default database to:

DELTA

☐ Attach database filename:

☑ Create temporary stored procedures for prepared SQL statements and drop the stored procedures:

● Only when you disconnect.

○ When you disconnect and as appropriate while you are connected.

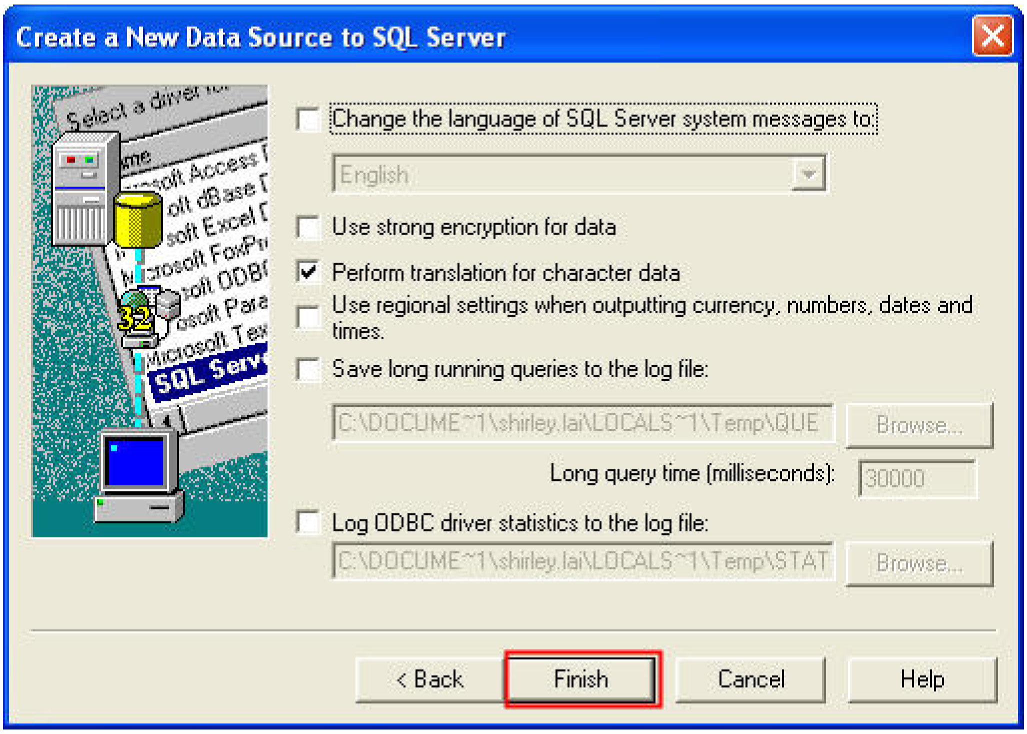
☑ Use ANSI quoted identifiers.

☑ Use ANSI nulls, paddings and warnings.

☐ Use the failover SQL Server if the primary SQL Server is not available.

Select a driver for
Name
Microsoft Access
Microsoft dBase
Microsoft Excel
Microsoft FoxPro
Microsoft ODBC
Microsoft Paradox
Microsoft Text
SQL Server
32
< Back
Next >
Cancel
Help

Press **Finish** button.



Create a New Data Source to SQL Server

☐ Change the language of SQL Server system messages to:

English

☐ Use strong encryption for data

☑ Perform translation for character data

☐ Use regional settings when outputting currency, numbers, dates and times.

☐ Save long running queries to the log file:

C:\DOCUME~1\shirley.lai\LOCALS~1\Temp\QUE

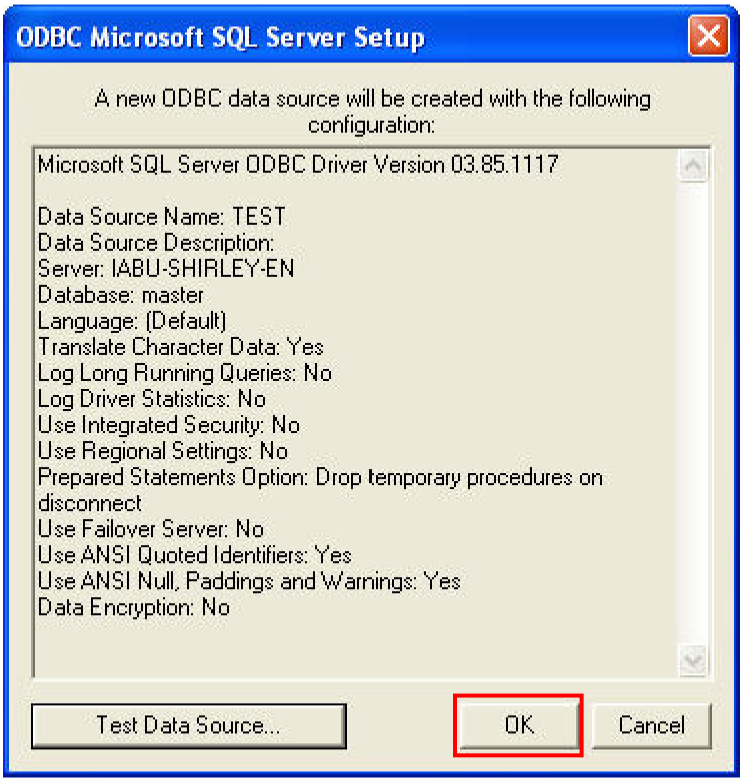
Long query time (milliseconds): 30000

☐ Log ODBC driver statistics to the log file:

C:\DOCUME~1\shirley.lai\LOCALS~1\Temp\STAT

Select a driver for
Name
Microsoft Access
Microsoft dBase
Microsoft Excel
Microsoft FoxPro
Microsoft ODBC
Microsoft Paradox
Microsoft Text
SQL Server
32
Browse...
Browse...
< Back
Finish
Cancel
Help

Press **OK** button to complete ODBC setup.



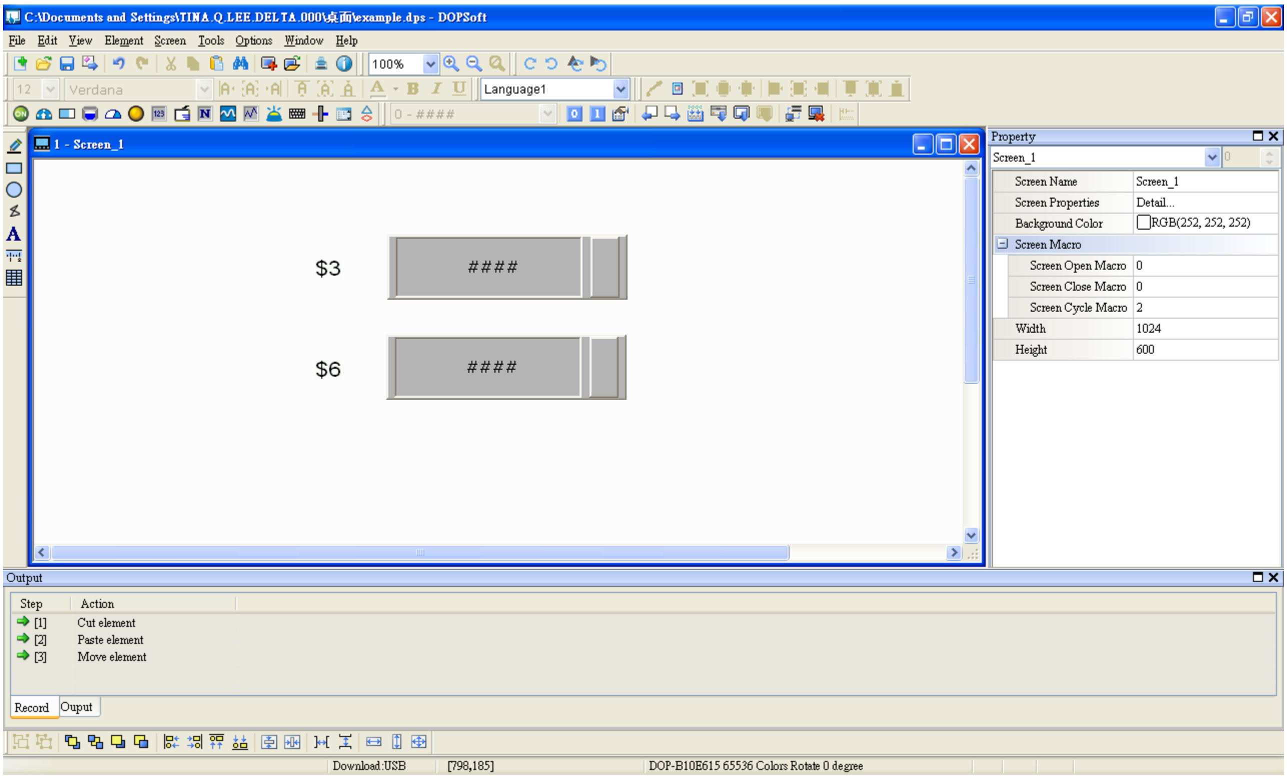
A new ODBC data source will be created with the following configuration:

Microsoft SQL Server ODBC Driver Version 03.85.1117

Data Source Name: TEST
Data Source Description:
Server: IABU-SHIRLEY-EN
Database: master
Language: (Default)
Translate Character Data: Yes
Log Long Running Queries: No
Log Driver Statistics: No
Use Integrated Security: No
Use Regional Settings: No
Prepared Statements Option: Drop temporary procedures on disconnect
Use Failover Server: No
Use ANSI Quoted Identifiers: Yes
Use ANSI Null, Paddings and Warnings: Yes
Data Encryption: No

7.1.2 Create HMI Project File

Start DOPSoft software program and click **File > New** or click **New** icon to create a new project. Then, click **Element > Input > Numeric Entry** to create two numeric entry elements ($3 and $6) on the screen. In this case, 10 inches color B10E615 type DOP series HMI is used.

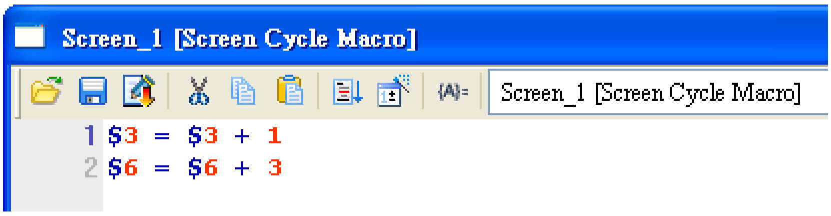

C:\Documents and Settings\TINA.Q.LEE.DELTA.000\桌面\example.dps - DOPSoft
File Edit View Element Screen Tools Options Window Help
1 - Screen_1
$3
####
$6
####
Property
Output
Record Ouput

Property	Screen_1
Screen Name	Screen_1
Screen Properties	Detail...
Background Color	RGB(252, 252, 252)
Screen Macro	
Screen Open Macro	0
Screen Close Macro	0
Screen Cycle Macro	2
Width	1024
Height	600

Step	Action
[1]	Cut element
[2]	Paste element
[3]	Move element

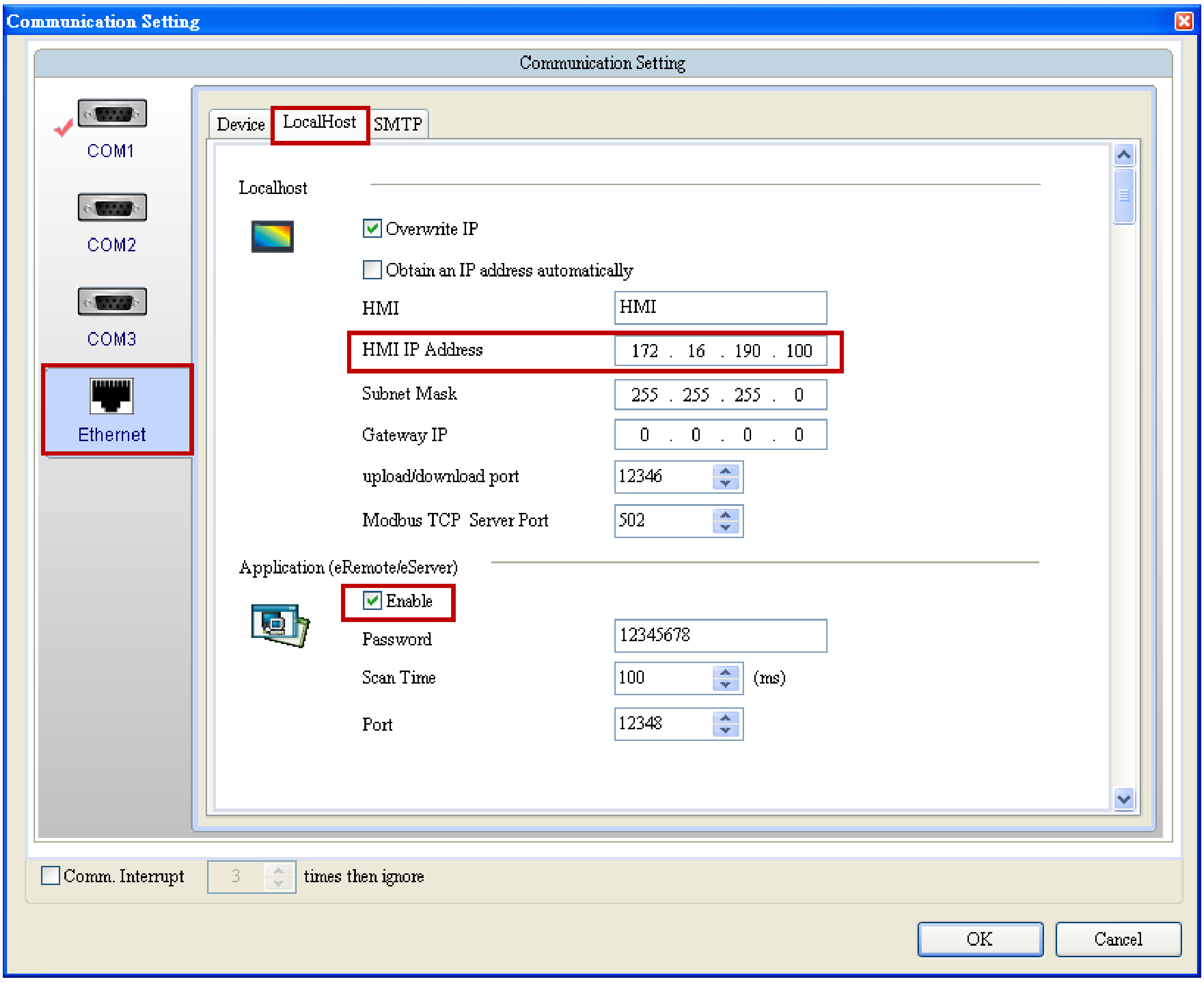
Download:USB [798,185] DOP-B10E615 65536 Colors Rotate 0 degree

Use Screen Cycle Macro and enter the following commands in macro command window.


Screen_1 [Screen Cycle Macro]
Screen_1 [Screen Cycle Macro]

```
$3 = $3 + 1
$6 = $6 + 3
```

Click **Options > Communication Setting > Ethernet > LocalHost,** set HMI IP Address and check the Application(eRemote / eServer) function **Enable.** Then, press **OK** button to finish the settings.


Communication Setting
Communication Setting
COM1
COM2
COM3
Ethernet
Device
LocalHost
SMTP
OK
Cancel

Localhost

☑ Overwrite IP

☐ Obtain an IP address automatically

HMI: HMI

HMI IP Address: 172 . 16 . 190 . 100

Subnet Mask: 255 . 255 . 255 . 0

Gateway IP: 0 . 0 . 0 . 0

upload/download port: 12346

Modbus TCP Server Port: 502

Application (eRemote/eServer)

☑ Enable

Password: 12345678

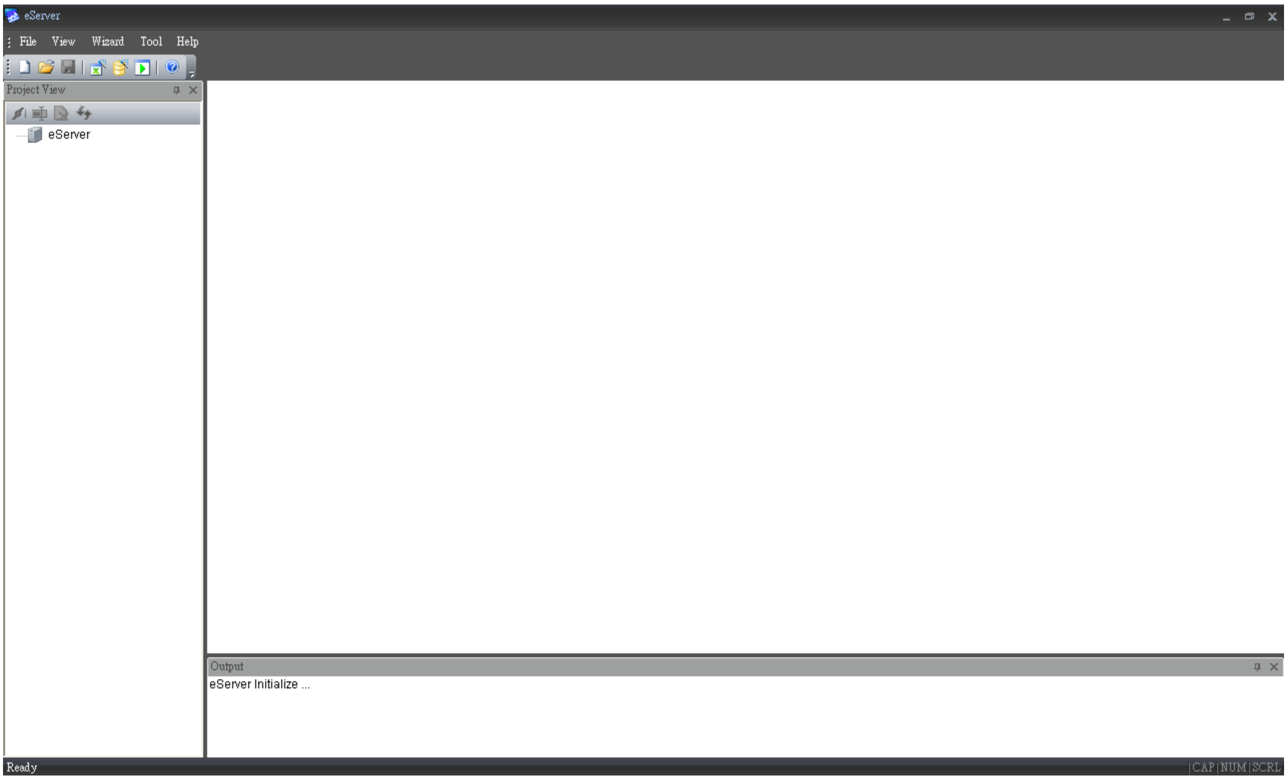
Scan Time: 100 (ms)

Port: 12348

☐ Comm. Interrupt 3 times then ignore

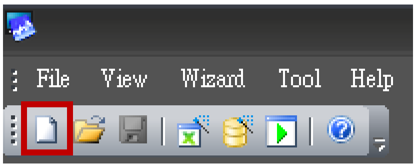
7.1.3 eServer Setting

1. After eServer is started, eServer window will open.

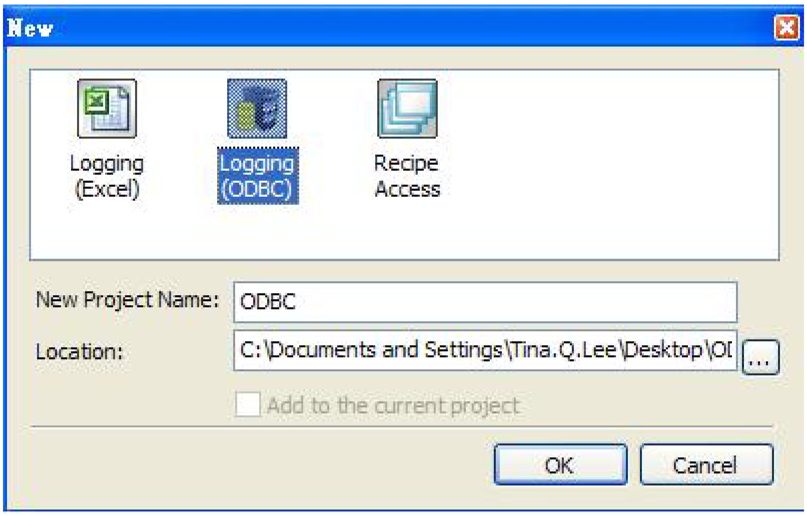

eServer
File View Wizard Tool Help
Project View
eServer
Output
Ready
CAP NUM SCRL

eServer Initialize ...

3. Click **File > New** or click icon to create a new project file.


File View Wizard Tool Help

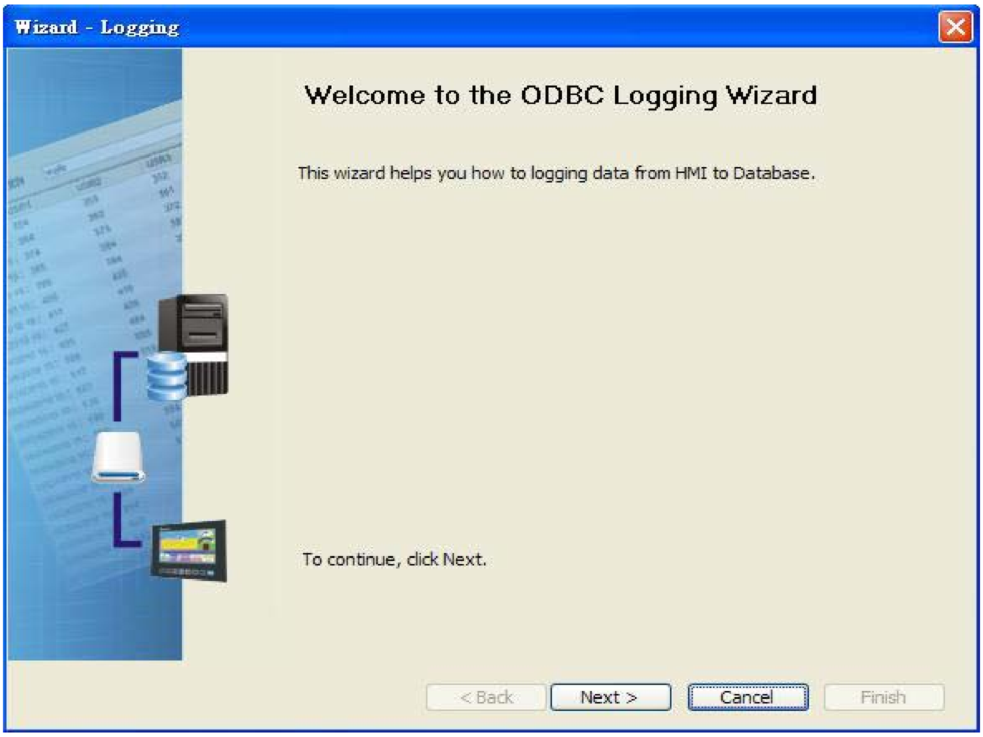
4. Select icon to enable ODBC Logging Wizard.


New
Logging (Excel)
Logging (ODBC)
Recipe Access
...
OK
Cancel

New Project Name: ODBC

Location: C:\Documents and Settings\Tina.Q.Lee\Desktop\OI

☐ Add to the current project

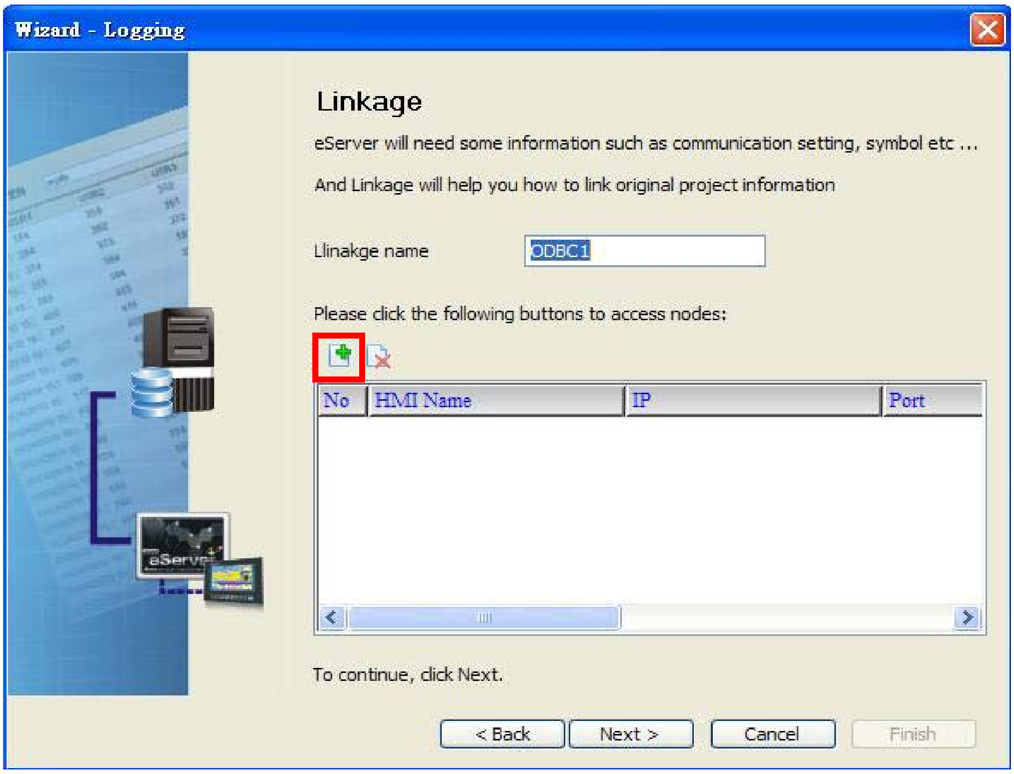

Wizard - Logging
Welcome to the ODBC Logging Wizard
< Back
Next >
Cancel
Finish

This wizard helps you how to logging data from HMI to Database.

To continue, click Next.

Press **Next** button to go to next step.

5. Click **New** icon to access nodes (link to HMI).


Wizard - Logging
Linkage
No
HMI Name
IP
Port
< Back
Next >
Cancel
Finish

eServer will need some information such as communication setting, symbol etc ...

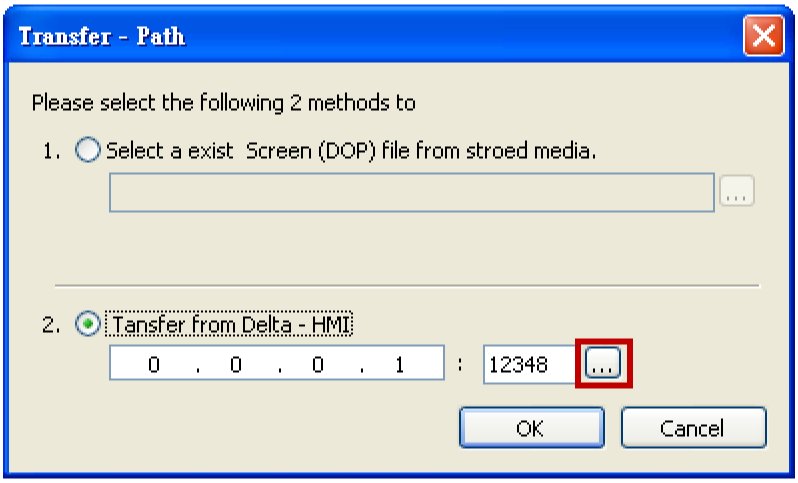
And Linkage will help you how to link original project information

Llinakge name: ODBC1

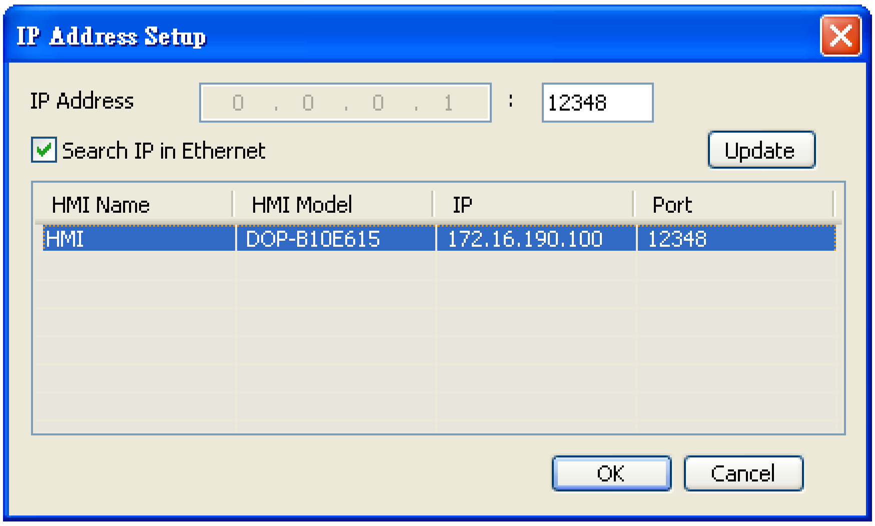
Please click the following buttons to access nodes:

To continue, click Next.

Choose **Transfer from Delta – HMI** option to transfer the HMI screen project file via network communication directly.


Transfer - Path
Please select the following 2 methods to
1. ○ Select a exist Screen (DOP) file from stroed media.
2. ● Tansfer from Delta - HMI
0 . 0 . 0 . 1 : 12348
OK
Cancel

After searching HMI IP in Ethernet, select HMI Name is HMI, IP is 172.16.190.100, press **OK**.

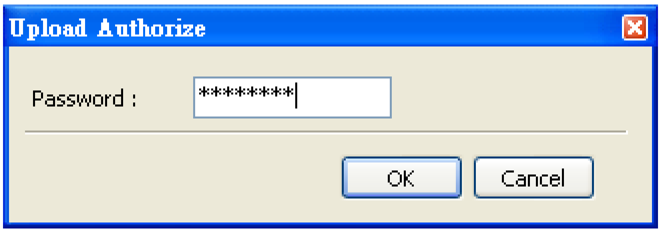

IP Address Setup
Update
OK
Cancel

IP Address 0 . 0 . 0 . 1 : 12348

☑ Search IP in Ethernet

HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348

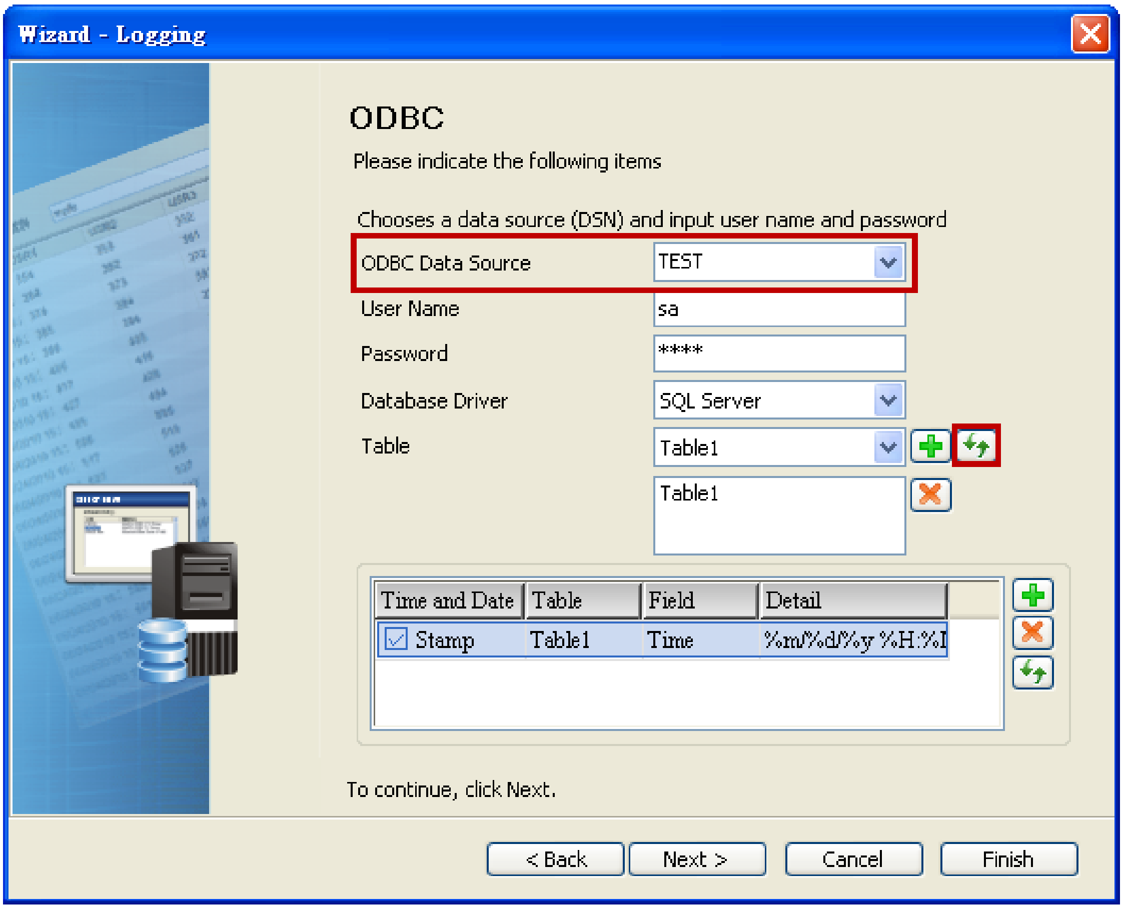
eServer will ask user to input the authorize password to connected with HMI. (The default password is 12345678.)


Upload Authorize
OK
Cancel

Password : ********

Press **OK** button to go to next step.

6. ODBC Data Source Setting: Create an ODBC Data Source pointing to your database. Please refer to the following settings and press refresh button to select table.


Wizard - Logging
< Back
Next >
Cancel
Finish

ODBC

Please indicate the following items

Chooses a data source (DSN) and input user name and password

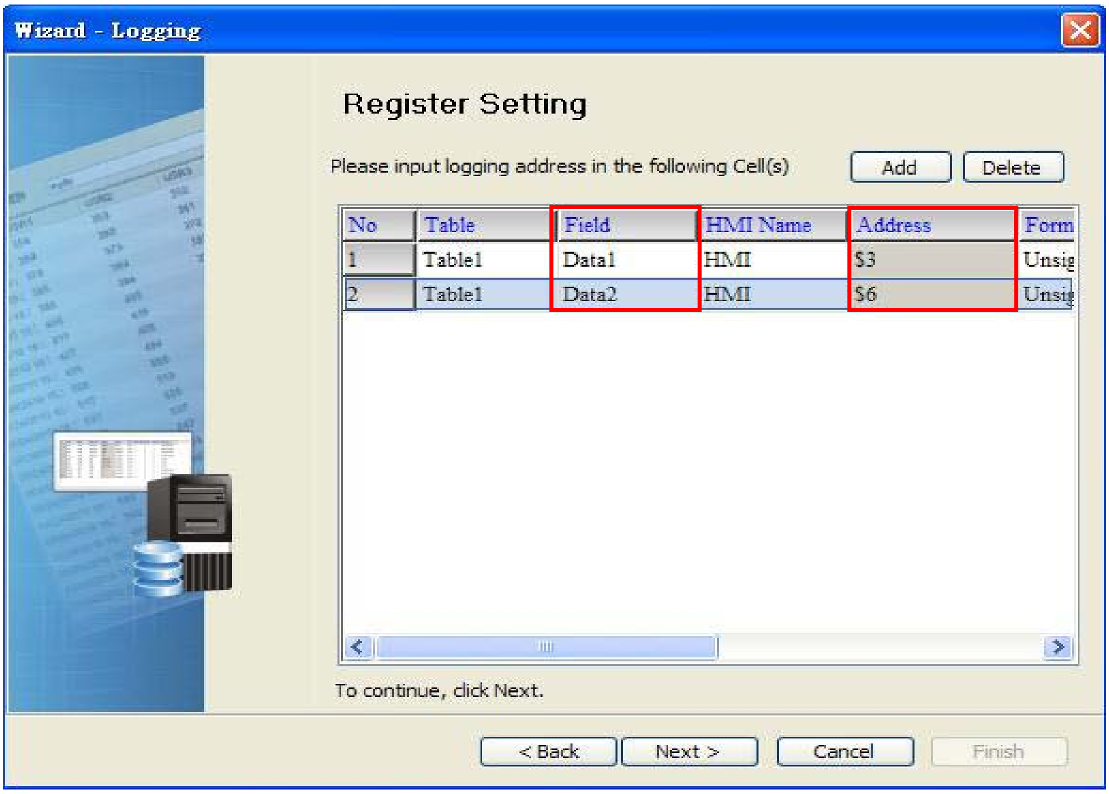
ODBC Data Source: TEST
User Name: sa
Password: ****
Database Driver: SQL Server
Table: Table1
Table1

Time and Date	Table	Field	Detail
☑ Stamp	Table1	Time	%m/%d/%y %H:%I

To continue, click Next.

Press **Next** button to go to next step.

7. Register Setting: Set the register address of the sampling data.


Wizard - Logging
Add
Delete
< Back
Next >
Cancel
Finish

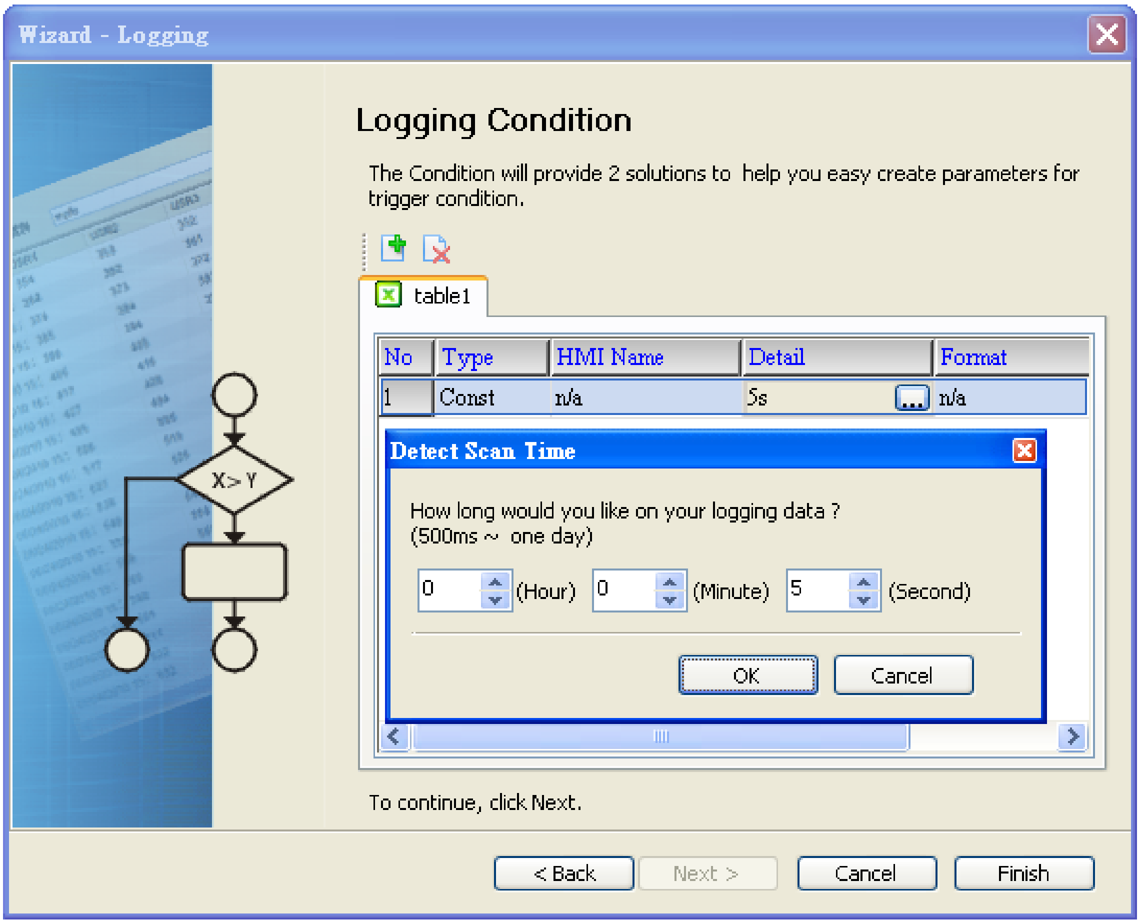
Register Setting

Please input logging address in the following Cell(s)

No	Table	Field	HMI Name	Address	Form
1	Table1	Data1	HMI	$3	Unsig
2	Table1	Data2	HMI	$6	Unsig

To continue, click Next.

8. Set the sampling conditions to constant **5s**.


Wizard - Logging
X> Y
table1
< Back
Next >
Cancel
Finish

Logging Condition

The Condition will provide 2 solutions to help you easy create parameters for trigger condition.

No	Type	HMI Name	Detail	Format
1	Const	n/a	5s	n/a

Detect Scan Time

How long would you like on your logging data ?
(500ms ~ one day)

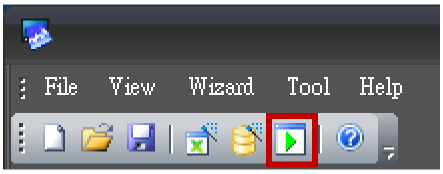
0 (Hour) 0 (Minute) 5 (Second)

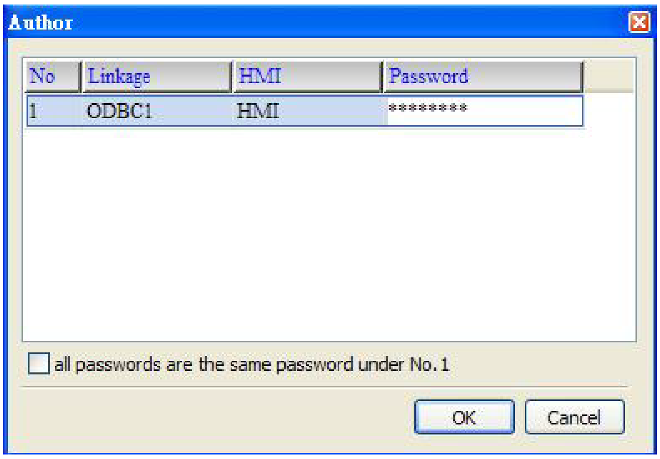
OK
Cancel

To continue, click Next.

Press **Next** button to continue.

9. Press ▷ icon. After the password 12345678 is entered, the system will start sampling operation, i.e. writing data in Microsoft Access.

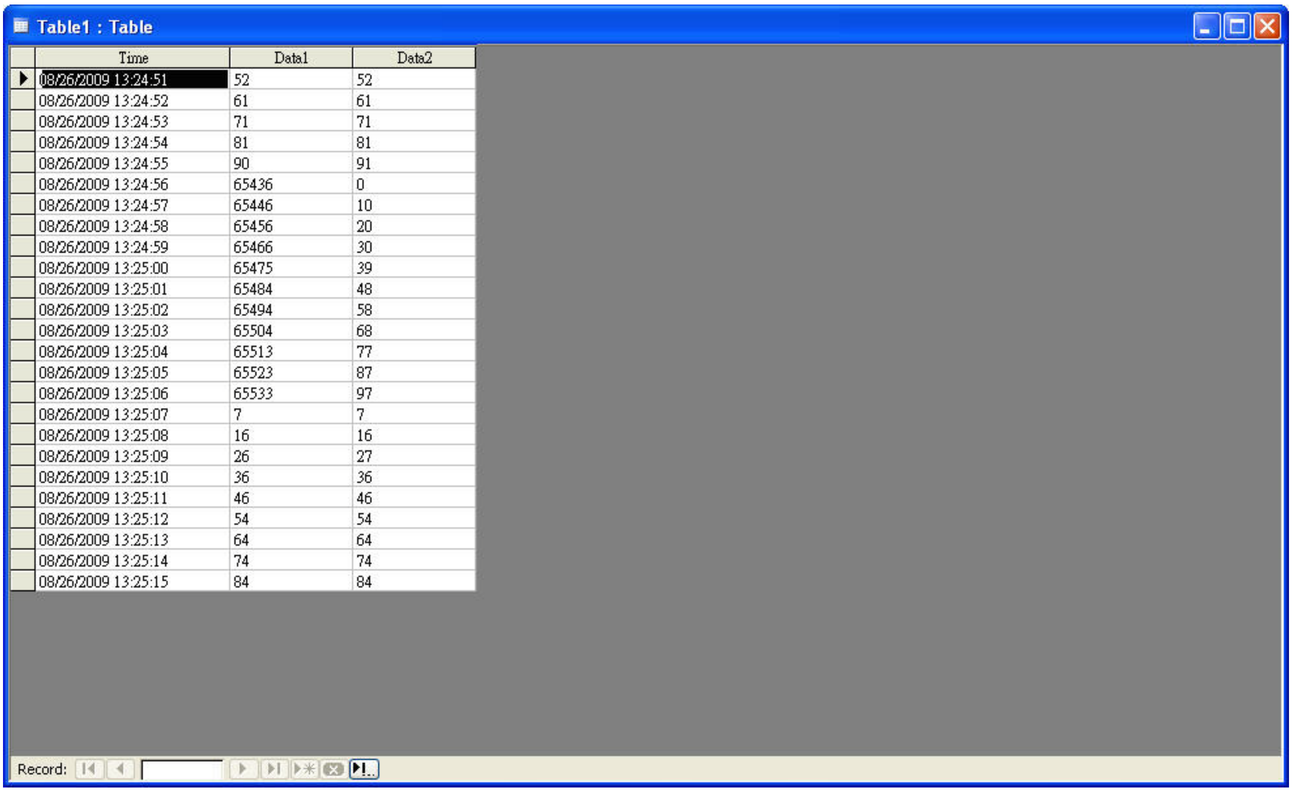

File
View
Wizard
Tool
Help


Author

No	Linkage	HMI	Password
1	ODBC1	HMI	********

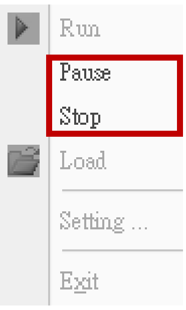
☐ all passwords are the same password under No.1

OK
Cancel



Time	Data1	Data2
08/26/2009 13:24:51	52	52
08/26/2009 13:24:52	61	61
08/26/2009 13:24:53	71	71
08/26/2009 13:24:54	81	81
08/26/2009 13:24:55	90	91
08/26/2009 13:24:56	65436	0
08/26/2009 13:24:57	65446	10
08/26/2009 13:24:58	65456	20
08/26/2009 13:24:59	65466	30
08/26/2009 13:25:00	65475	39
08/26/2009 13:25:01	65484	48
08/26/2009 13:25:02	65494	58
08/26/2009 13:25:03	65504	68
08/26/2009 13:25:04	65513	77
08/26/2009 13:25:05	65523	87
08/26/2009 13:25:06	65533	97
08/26/2009 13:25:07	7	7
08/26/2009 13:25:08	16	16
08/26/2009 13:25:09	26	27
08/26/2009 13:25:10	36	36
08/26/2009 13:25:11	46	46
08/26/2009 13:25:12	54	54
08/26/2009 13:25:13	64	64
08/26/2009 13:25:14	74	74
08/26/2009 13:25:15	84	84

10. If the users want to pause or stop the sampling operation, only right-click eServer icon at the bottom right of Windows screen and select Pause or Stop option from the pop-up menu, the sampling operation will pause and stop immediately.



Chapter 8 Writing Data in Microsoft Access 2007 at Windows 7

Before creating testing example, make sure to change the upload and download option (**Options > Environment**) on DOPSoft first. The default setting of upload and download is via **USB**. If the users need to use **Ethernet**, please change the default setting by referring to **Appendix A**.

8.1 Example

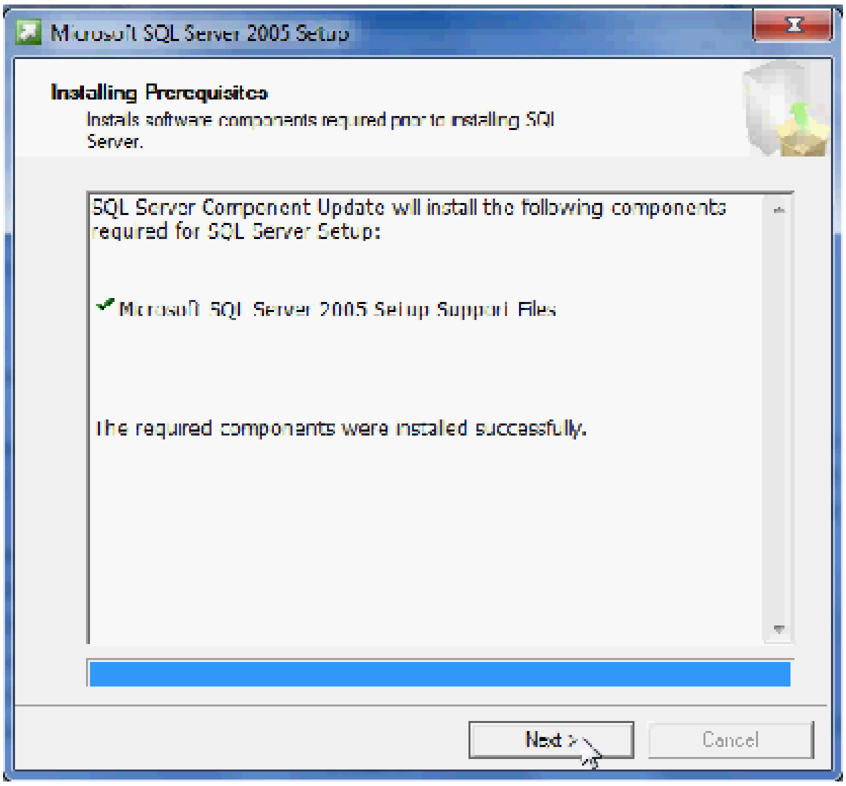
This example is used to help the users to understand how to use eServer to read the data of the register addresses $100 every second, record the data in Microsoft Access database via ODBC interface, and save the collected data into the specified folder.

8.1.1 Database Setting

1. Install SQL Server 2005 Express Edition：

Presently only SQL 2005 Express and SQL Server 2008 can used in Windows 7 OS, so we choose SQL Server 2005 Express as the database server. To download it, go to http://www.microsoft.com/downloads/details.aspx?familyid=3181842A-4090-4431-ACDD-9A1C832E65A6&displaylang=zh-tw and a download link will redirect the users to download it. (SQLEXPR_CHT.EXE is for x64 bits OS, and SQLEXPR_CHT32.EXE is for x32 bits OS)

After running the self-extracting file, starting the installation of SQL Server:



Microsoft SQL Server 2005 Setup

Installing Prerequisites

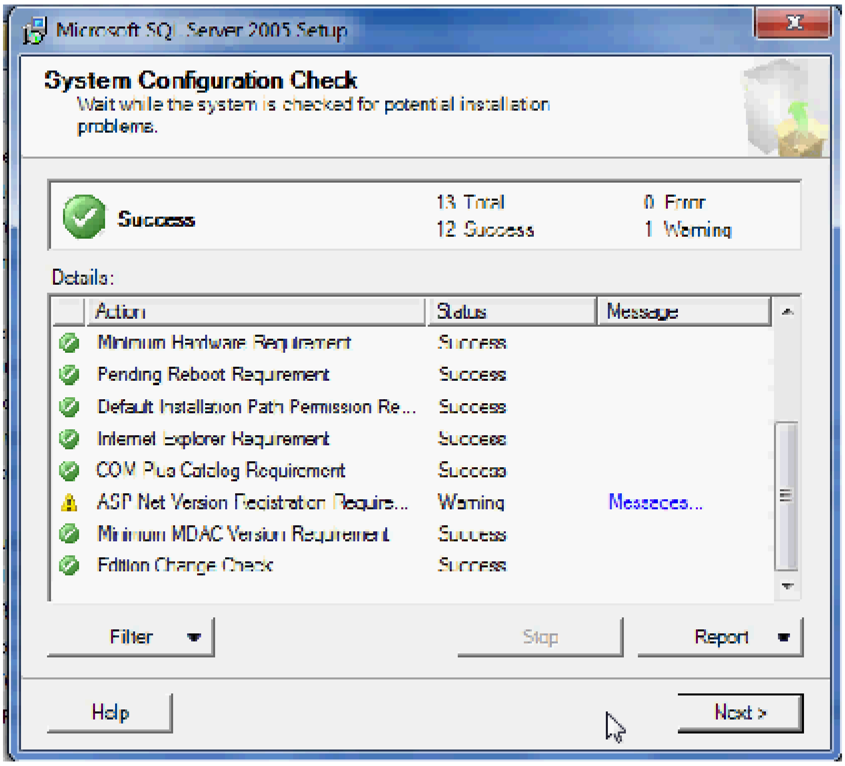
Installs software components required prior to installing SQL Server.

SQL Server Component Update will install the following components required for SQL Server Setup:

✓ Microsoft SQL Server 2005 Setup Support Files

The required components were installed successfully.

Check system configuration, then click『Next』.



Microsoft SQL Server 2005 Setup

System Configuration Check

Wait while the system is checked for potential installation problems.

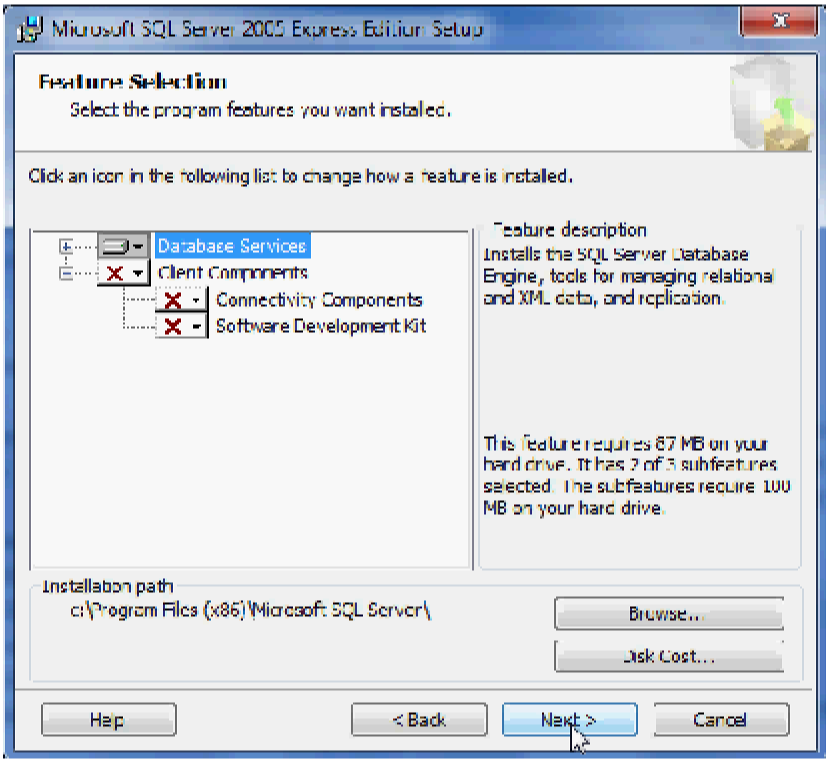
Success

13 Total	0 Error	
12 Success	1 Warning	

Details:

	Action	Status	Message
✓	Minimum Hardware Requirement	Success	
✓	Pending Reboot Requirement	Success	
✓	Default Installation Path Permission Re...	Success	
✓	Internet Explorer Requirement	Success	
✓	COM Plus Catalog Requirement	Success	
⚠	ASP.Net Version Registration Require...	Warning	Messages...
✓	Minimum MDAC Version Requirement	Success	
✓	Edition Change Check	Success	

Feature selection. Set as below figure and click『Next』.



Microsoft SQL Server 2005 Express Edition Setup

Feature Selection

Select the program features you want installed.

Click an icon in the following list to change how a feature is installed.

- Database Services
- Client Components
  - Connectivity Components
  - Software Development Kit

Feature description

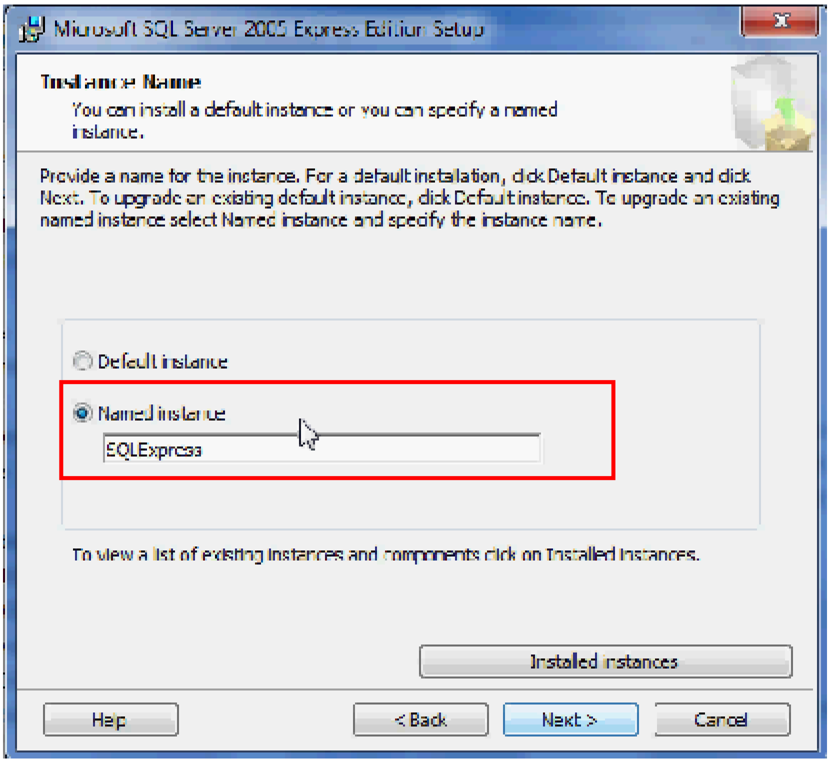
Installs the SQL Server Database Engine, tools for managing relational and XML data, and replication.

This feature requires 87 MB on your hard drive. It has 2 of 3 subfeatures selected. The subfeatures require 100 MB on your hard drive.

Installation path

c:\Program Files (x86)\Microsoft SQL Server\

Input the instance name of SQL server and click『Next』.



Microsoft SQL Server 2005 Express Edition Setup

Instance Name

You can install a default instance or you can specify a named instance.

Provide a name for the instance. For a default installation, click Default instance and click Next. To upgrade an existing default instance, click Default instance. To upgrade an existing named instance select Named instance and specify the instance name.

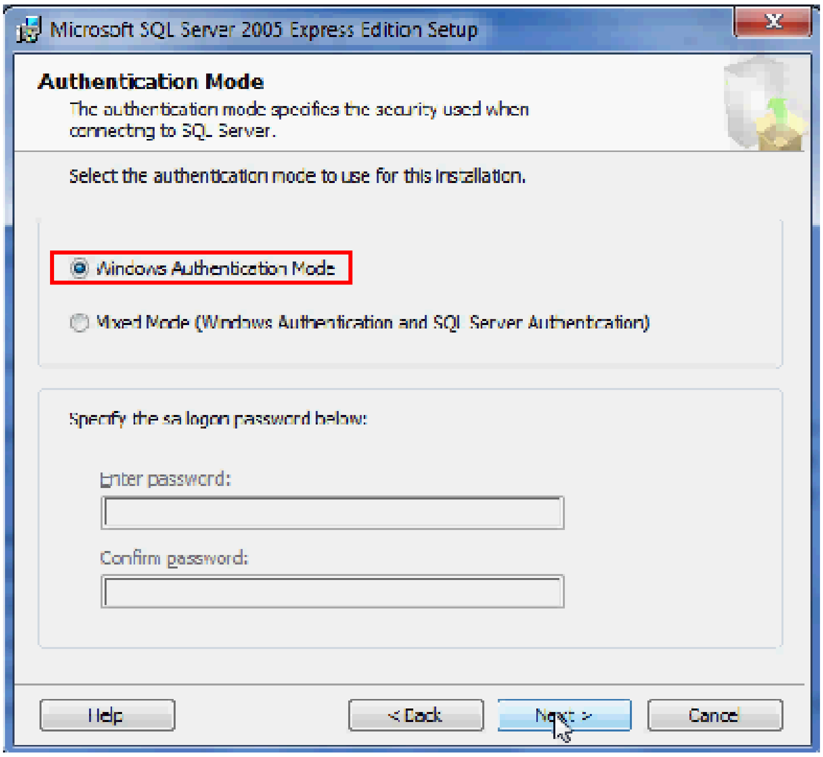
○ Default instance

● Named instance

SQLExpress

To view a list of existing instances and components click on Installed instances.

Choose the authentication mode. Set as below figure and click『Next』.



Microsoft SQL Server 2005 Express Edition Setup

Authentication Mode

The authentication mode specifies the security used when connecting to SQL Server.

Select the authentication mode to use for this installation.

● Windows Authentication Mode

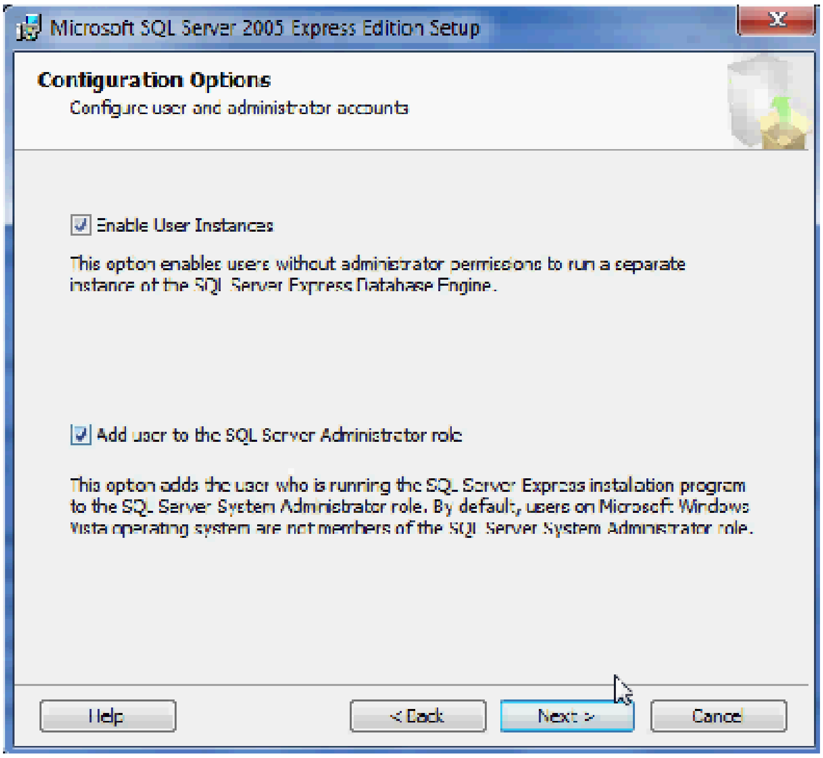
○ Mixed Mode (Windows Authentication and SQL Server Authentication)

Specify the sa logon password below:

Enter password:

Confirm password:

Setup the account. Set as below figure and click『Next』.



Microsoft SQL Server 2005 Express Edition Setup

Configuration Options

Configure user and administrator accounts

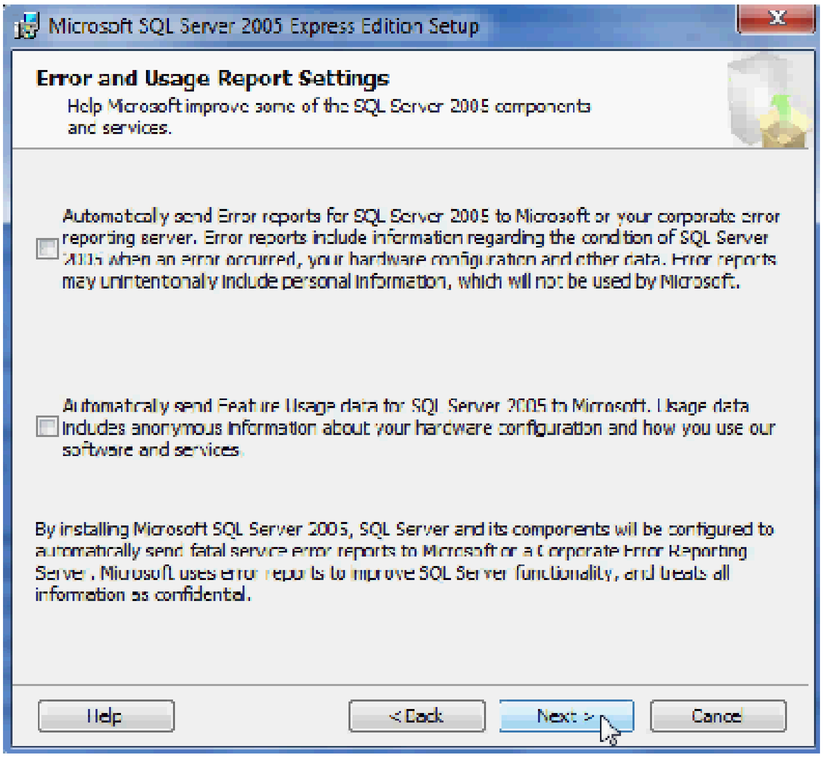
☑ Enable User Instances

This option enables users without administrator permissions to run a separate instance of the SQL Server Express Database Engine.

☑ Add user to the SQL Server Administrator role

This option adds the user who is running the SQL Server Express installation program to the SQL Server System Administrator role. By default, users on Microsoft Windows Vista operating system are not members of the SQL Server System Administrator role.

Setup the error report way. Set as below figure and click 『Next』.



Error and Usage Report Settings

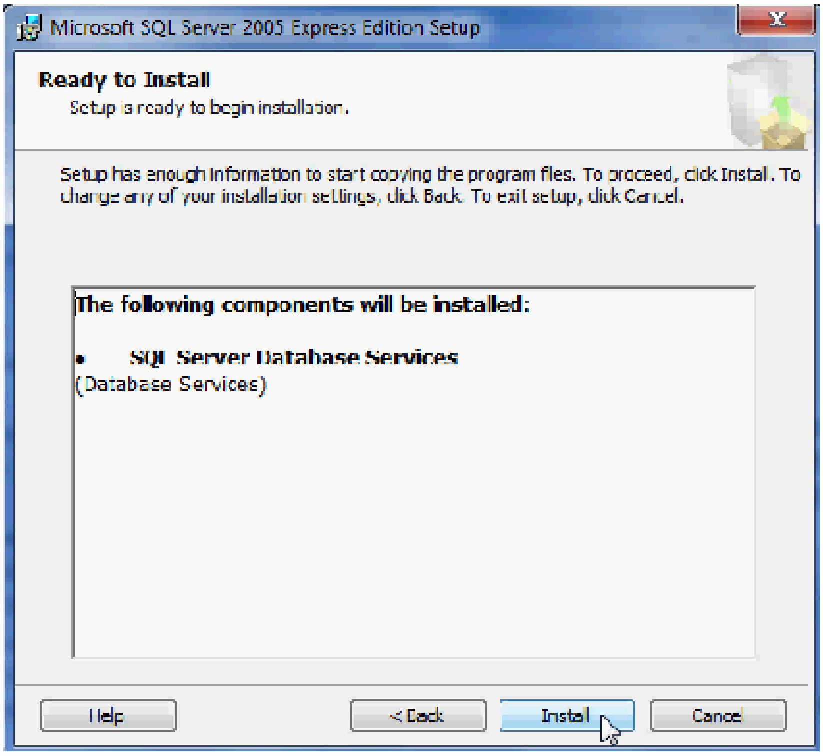
Help Microsoft improve some of the SQL Server 2005 components and services.

☐ Automatically send Error reports for SQL Server 2005 to Microsoft or your corporate error reporting server. Error reports include information regarding the condition of SQL Server 2005 when an error occurred, your hardware configuration and other data. Error reports may unintentionally include personal information, which will not be used by Microsoft.

☐ Automatically send Feature Usage data for SQL Server 2005 to Microsoft. Usage data includes anonymous information about your hardware configuration and how you use our software and services.

By installing Microsoft SQL Server 2005, SQL Server and its components will be configured to automatically send fatal service error reports to Microsoft or a Corporate Error Reporting Server. Microsoft uses error reports to improve SQL Server functionality, and treats all information as confidential.

Setup completely and start to install.



Ready to Install

Setup is ready to begin installation.

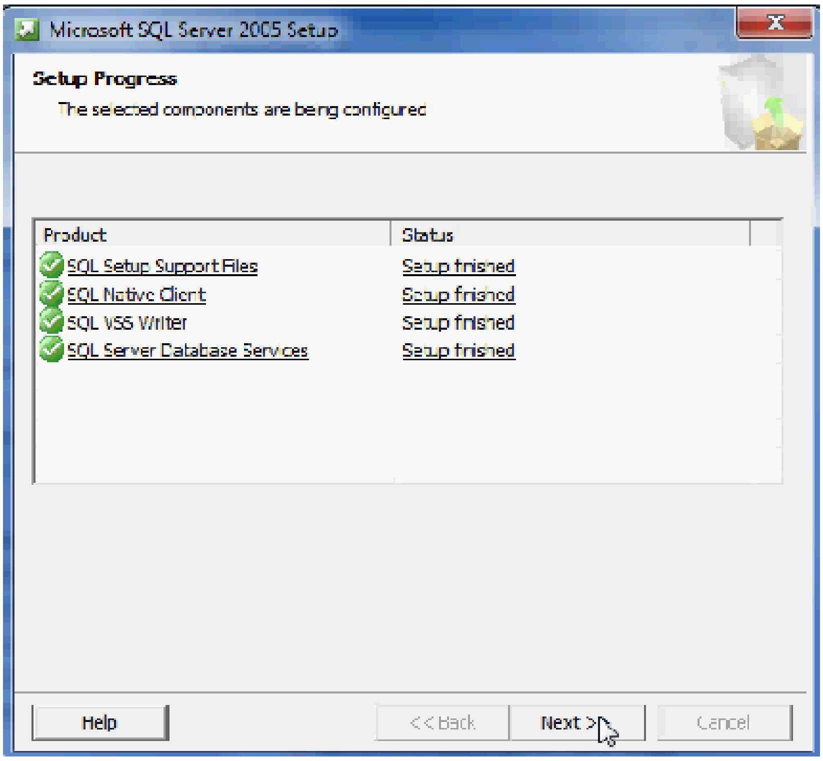
Setup has enough information to start copying the program files. To proceed, click Install. To change any of your installation settings, click Back. To exit setup, click Cancel.

The following components will be installed:

- **SQL Server Database Services**

(Database Services)

The progress of installation shows as , and then click『Next』.

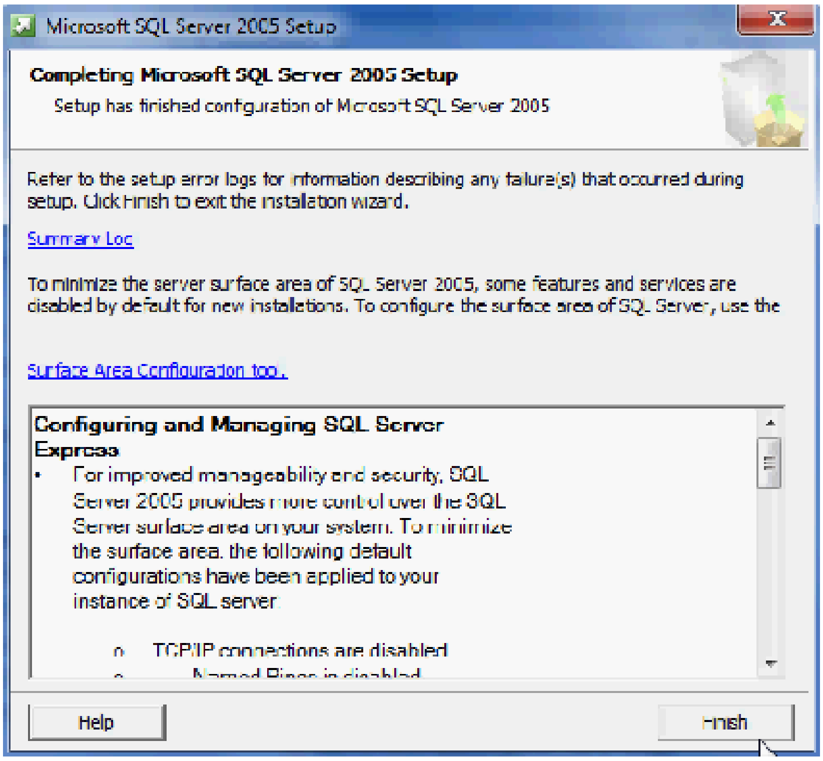


Setup Progress

The selected components are being configured

Product	Status
SQL Setup Support Files	Setup finished
SQL Native Client	Setup finished
SQL VSS Writer	Setup finished
SQL Server Database Services	Setup finished

The report of the SQL Server installation shows. Click『Finish』.



Completing Microsoft SQL Server 2005 Setup

Setup has finished configuration of Microsoft SQL Server 2005

Refer to the setup error logs for information describing any failure(s) that occurred during setup. Click Finish to exit the installation wizard.

Summary Log

To minimize the server surface area of SQL Server 2005, some features and services are disabled by default for new installations. To configure the surface area of SQL Server, use the

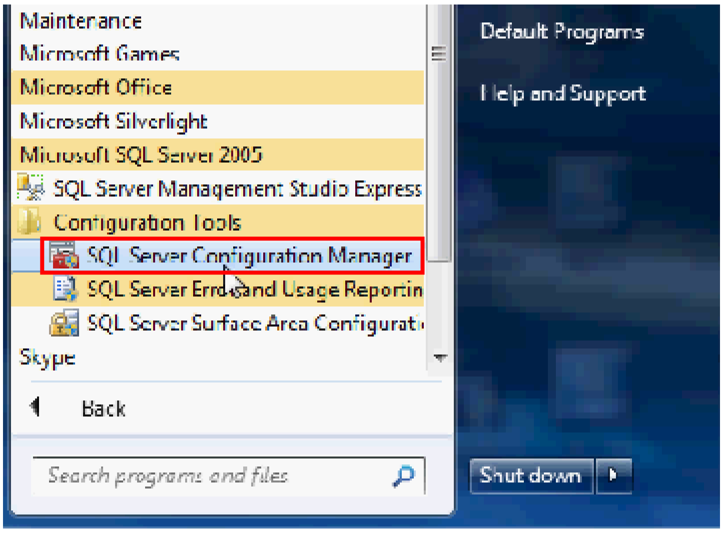
Surface Area Configuration tool.

Configuring and Managing SQL Server Express

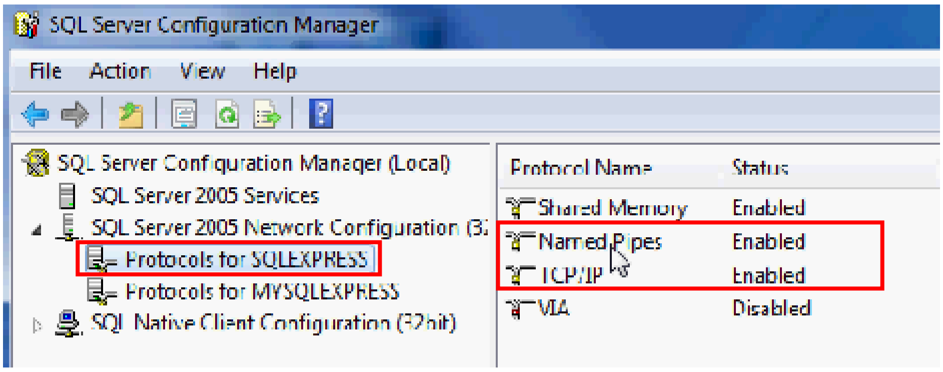
- For improved manageability and security, SQL Server 2005 provides more control over the SQL Server surface area on your system. To minimize the surface area, the following default configurations have been applied to your instance of SQL server.
  - TCP/IP connections are disabled
  - Named Pipes is disabled

2. SQL Server Configuration Setup：

Start『SQL Server Configuration Manager』.

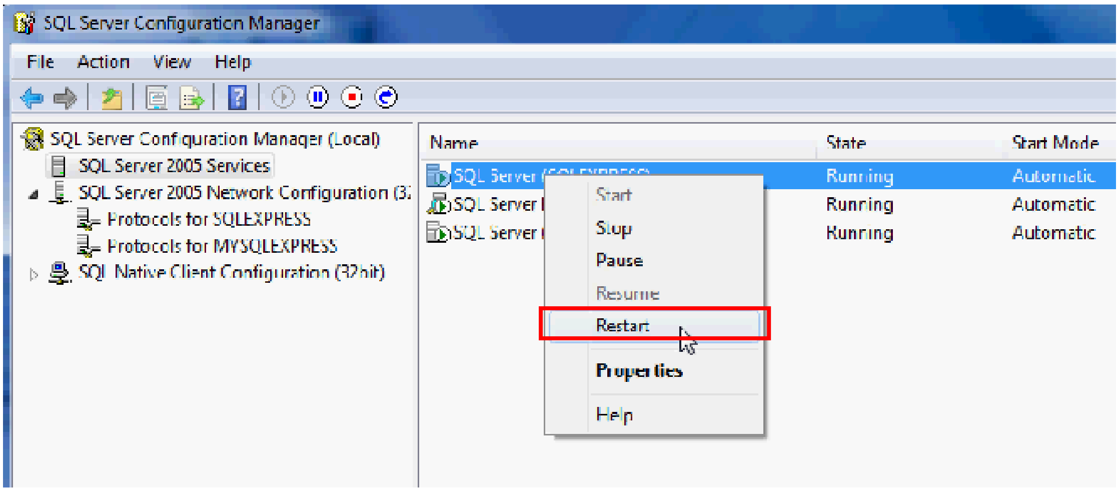

Maintenance
Microsoft Games
Microsoft Office
Microsoft Silverlight
Microsoft SQL Server 2005
SQL Server Management Studio Express
Configuration Tools
SQL Server Configuration Manager
SQL Server Error and Usage Reportin
SQL Server Surface Area Configurati
Skype
Back
Search programs and files
Default Programs
Help and Support
Shut down

Enable the Named Pipes and TCP/IP communication protocol.


SQL Server Configuration Manager
File Action View Help
SQL Server Configuration Manager (Local)
SQL Server 2005 Services
SQL Server 2005 Network Configuration (3
Protocols for SQLEXPRESS
Protocols for MYSQLEXPRESS
SQL Native Client Configuration (32bit)

Protocol Name	Status
Shared Memory	Enabled
Named Pipes	Enabled
TCP/IP	Enabled
VIA	Disabled

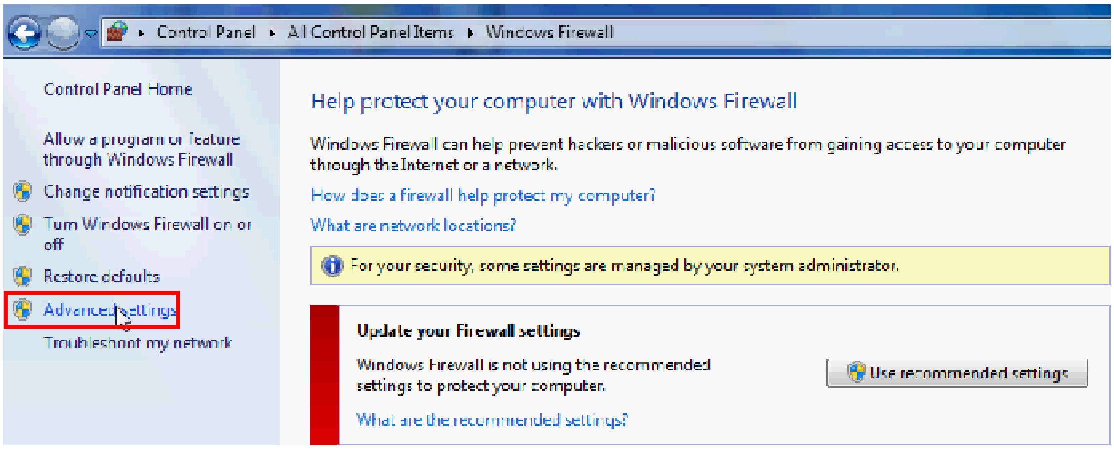
Restart the instance of SQL server.


SQL Server Configuration Manager
File
Action
View
Help
SQL Server Configuration Manager (Local)
SQL Server 2005 Services
SQL Server 2005 Network Configuration (3
Protocols for SQLEXPRESS
Protocols for MYSQLEXPRESS
SQL Native Client Configuration (32bit)
Start
Stop
Pause
Resume
Restart
Properties
Help

Name	State	Start Mode
SQL Server (SQLEXPRESS)	Running	Automatic
SQL Server	Running	Automatic
SQL Server	Running	Automatic

3. Windows Firewall Setting：

Click 『Control Panel』 ➔ 『Windows Firewall』, then enter the 『Advanced Settings』.



Help protect your computer with Windows Firewall

Windows Firewall can help prevent hackers or malicious software from gaining access to your computer through the Internet or a network.

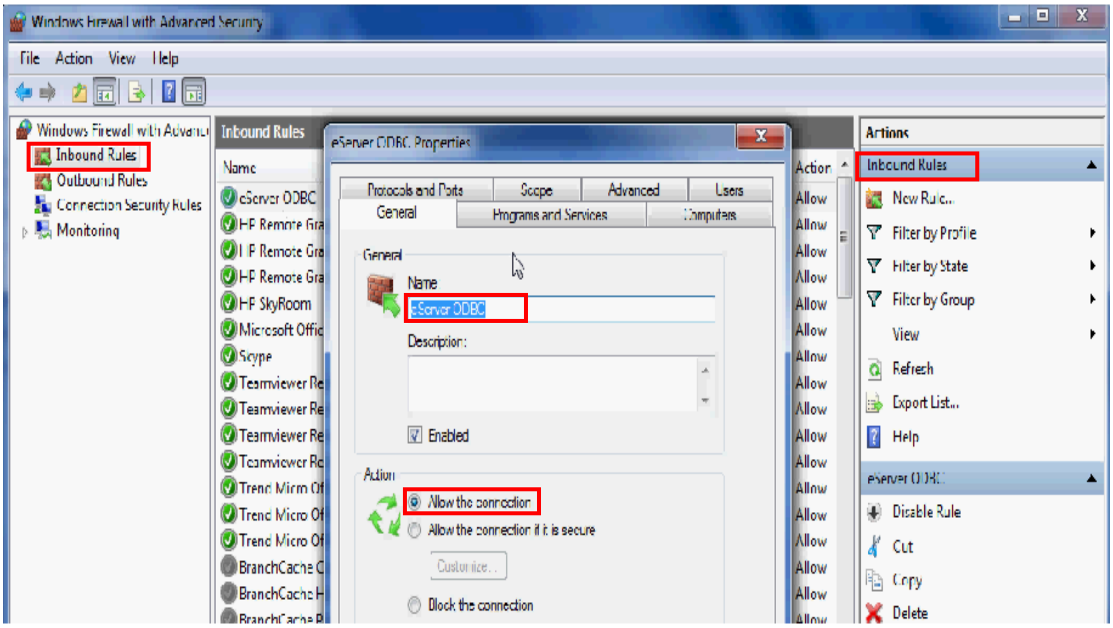
For your security, some settings are managed by your system administrator.

Update your Firewall settings

Windows Firewall is not using the recommended settings to protect your computer.

Control Panel ▸ All Control Panel Items ▸ Windows Firewall
Control Panel Home
Allow a program or feature through Windows Firewall
Change notification settings
Turn Windows Firewall on or off
Restore defaults
Advanced settings
Troubleshoot my network
How does a firewall help protect my computer?
What are network locations?
What are the recommended settings?
Use recommended settings

Choose『Inbound Rules』then click『New Rule...』. Input the name of new import rule and choose the connection action.



eServer ODBC Properties

General

Name: eServer ODBC

Description:

☑ Enabled

Action

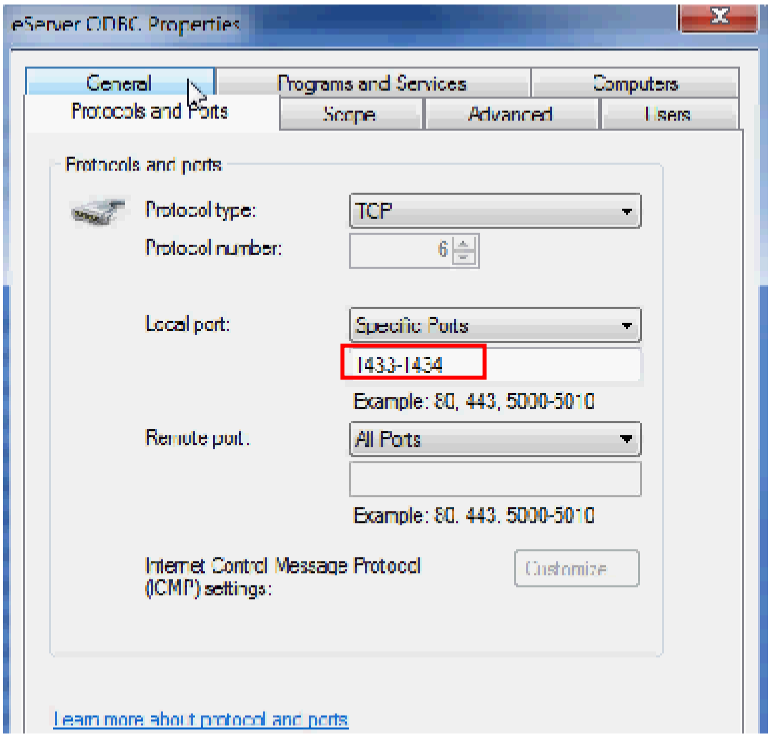
● Allow the connection

○ Allow the connection if it is secure

○ Block the connection

Windows Firewall with Advanced Security
File Action View Help
Windows Firewall with Advanced
Inbound Rules
Outbound Rules
Connection Security Rules
Monitoring
Inbound Rules
Name
eServer ODBC
HP Remote Gra
HP Remote Gra
HP Remote Gra
HP SkyRoom
Microsoft Offic
Skype
Teamviewer Re
Teamviewer Re
Teamviewer Re
Teamviewer Re
Trend Micro Of
Trend Micro Of
Trend Micro Of
BranchCache C
BranchCache H
BranchCache P
Protocols and Ports
Scope
Advanced
Users
General
Programs and Services
Computers
Customize...
Action
Allow
Actions
Inbound Rules
New Rule...
Filter by Profile
Filter by State
Filter by Group
View
Refresh
Export List...
Help
eServer ODBC
Disable Rule
Cut
Copy
Delete

Enable specific ports for the Named Pipes connection and the TCP/IP connection. Due to the connection default port no. are 1433 and 1434, we set local connection port as “1433-1434”.


eServer ODBC Properties
General
Programs and Services
Computers
Protocols and Ports
Scope
Advanced
Users
Protocols and ports
Customize
Learn more about protocol and ports

Protocol type: TCP

Protocol number: 6

Local port: Specific Ports

1433-1434

Example: 80, 443, 5000-5010

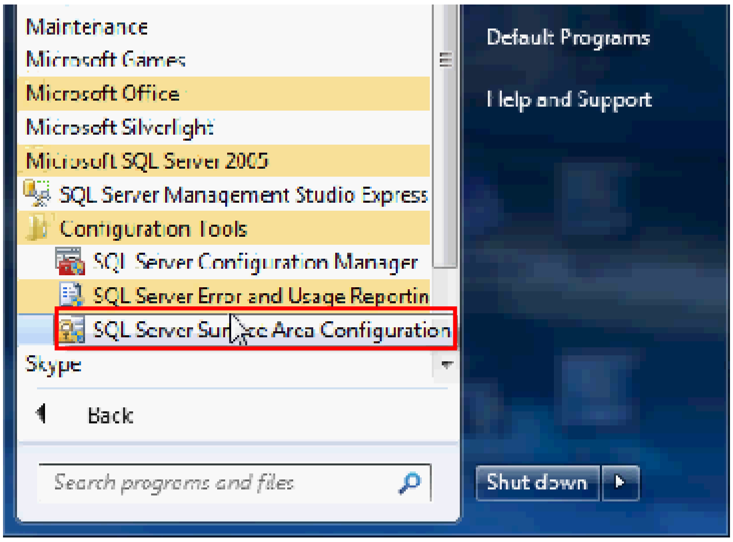
Remote port: All Ports

Example: 80, 443, 5000-5010

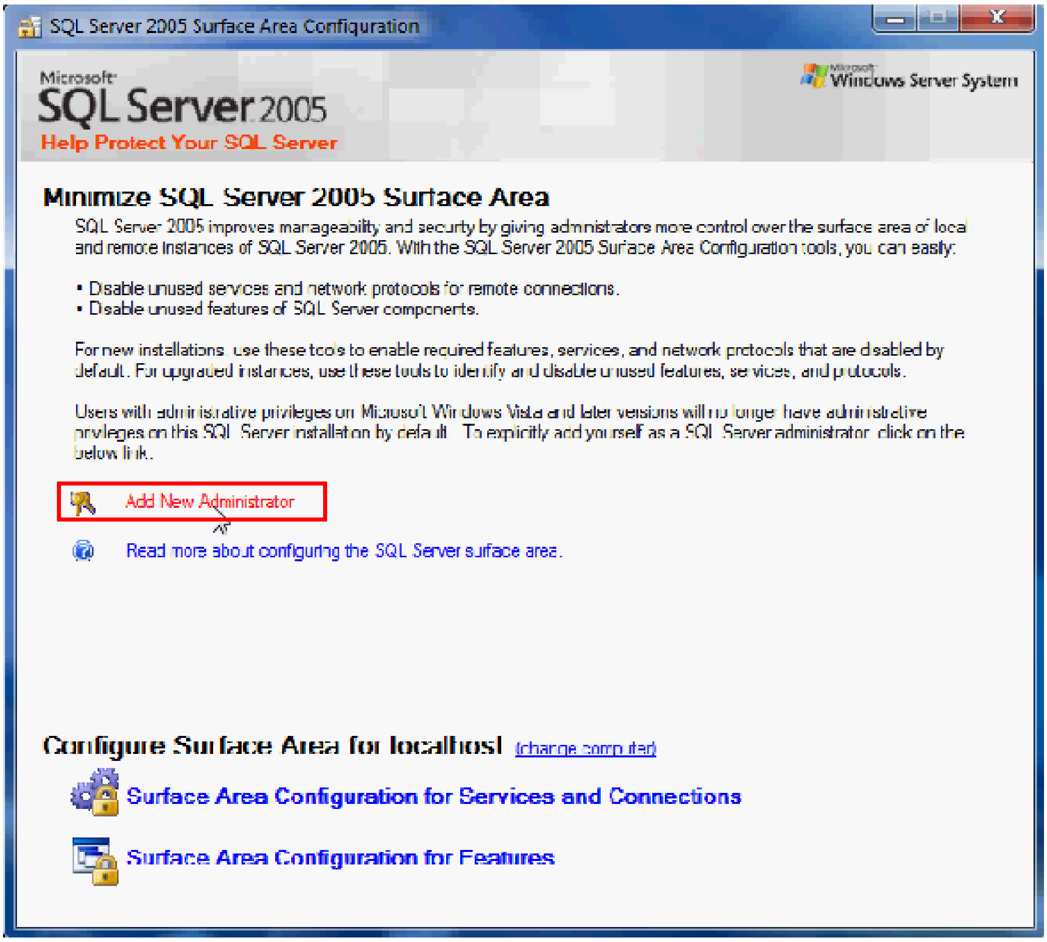
Internet Control Message Protocol (ICMP) settings:

4. SQL Server User Authority：

Start『SQL Server Surface Area Configuration』.


Maintenance
Microsoft Games
Microsoft Office
Microsoft Silverlight
Microsoft SQL Server 2005
SQL Server Management Studio Express
Configuration Tools
SQL Server Configuration Manager
SQL Server Error and Usage Reportin
SQL Server Surface Area Configuration
Skype
Back
Search programs and files
Default Programs
Help and Support
Shut down

Click the『Add New Administrator』.


SQL Server 2005 Surface Area Configuration
Microsoft SQL Server 2005
Help Protect Your SQL Server
Microsoft Windows Server System

Minimize SQL Server 2005 Surface Area

SQL Server 2005 improves manageability and security by giving administrators more control over the surface area of local and remote instances of SQL Server 2005. With the SQL Server 2005 Surface Area Configuration tools, you can easily:

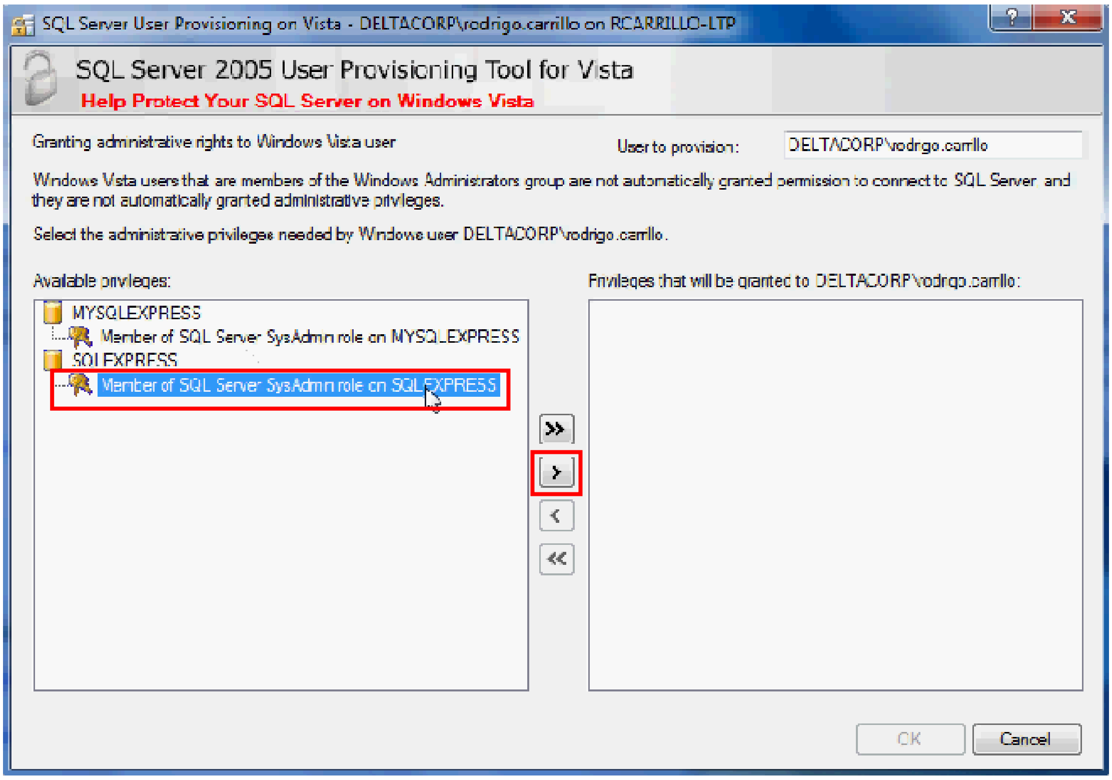
- Disable unused services and network protocols for remote connections.
- Disable unused features of SQL Server components.

For new installations, use these tools to enable required features, services, and network protocols that are disabled by default. For upgraded instances, use these tools to identify and disable unused features, services, and protocols.

Users with administrative privileges on Microsoft Windows Vista and later versions will no longer have administrative privileges on this SQL Server installation by default. To explicitly add yourself as a SQL Server administrator, click on the below link.

Add New Administrator
Read more about configuring the SQL Server surface area.
Configure Surface Area for localhost (change computer)
Surface Area Configuration for Services and Connections
Surface Area Configuration for Features

Choose authority of server to user. After choosing, click『>』.



SQL Server User Provisioning on Vista - DELTACORP\rodrigo.carrillo on RCARRILLO-LTP

SQL Server 2005 User Provisioning Tool for Vista

Help Protect Your SQL Server on Windows Vista

Granting administrative rights to Windows Vista user

User to provision: DELTACORP\rodrigo.carrillo

Windows Vista users that are members of the Windows Administrators group are not automatically granted permission to connect to SQL Server and they are not automatically granted administrative privileges.

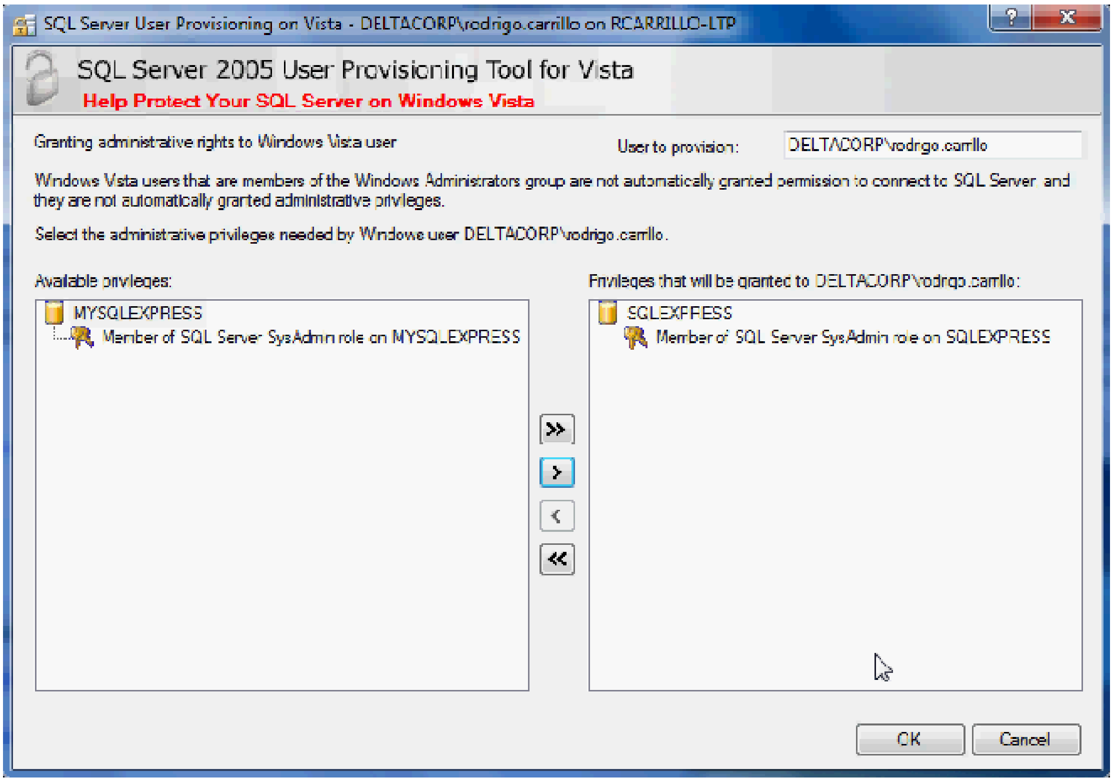
Select the administrative privileges needed by Windows user DELTACORP\rodrigo.carrillo.

Available privileges:

- MYSQLEXPRESS
  - Member of SQL Server SysAdmin role on MYSQLEXPRESS
- SQLEXPRESS
  - Member of SQL Server SysAdmin role on SQLEXPRESS

Privileges that will be granted to DELTACORP\rodrigo.carrillo:

Click『OK』and finish the setup.



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Select the administrative privileges needed by Windows user DELTACORP\rodrigo.carrillo.

Available privileges:

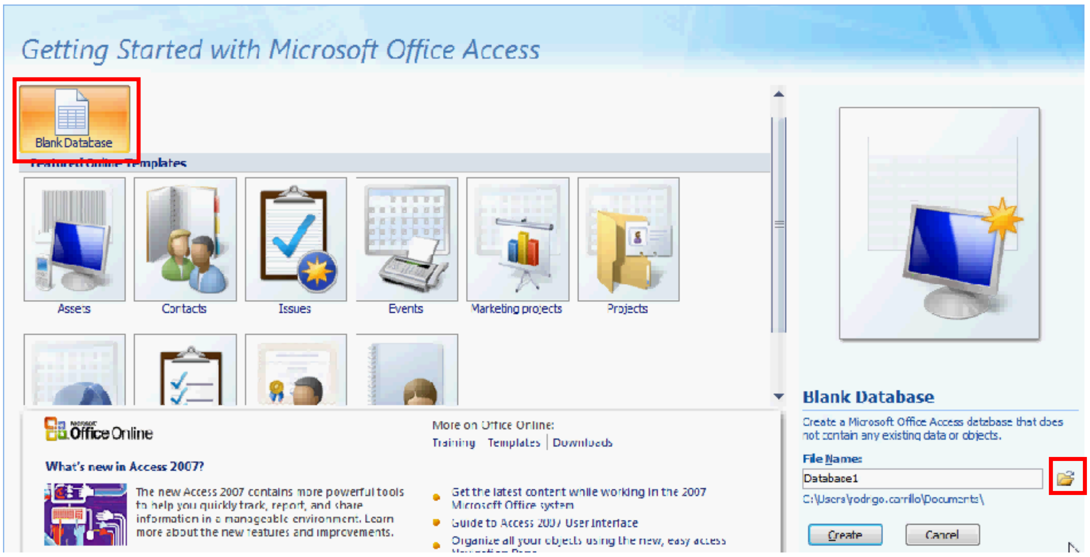
- MYSQLEXPRESS
  - Member of SQL Server SysAdmin role on MYSQLEXPRESS

Privileges that will be granted to DELTACORP\rodrigo.carrillo:

- SQLEXPRESS
  - Member of SQL Server SysAdmin role on SQLEXPRESS

5. Access 2007 Setting：

Open Access 2007 and click『Add New Database』, then click 📂 icon.



Getting Started with Microsoft Office Access
Blank Database
Featured Online Templates
Assets
Contacts
Issues
Events
Marketing projects
Projects
Office Online
More on Office Online:
Training
Templates
Downloads
Create
Cancel

What's new in Access 2007?

The new Access 2007 contains more powerful tools to help you quickly track, report, and share information in a manageable environment. Learn more about the new features and improvements.

- Get the latest content while working in the 2007 Microsoft Office system
- Guide to Access 2007 User Interface
- Organize all your objects using the new, easy access

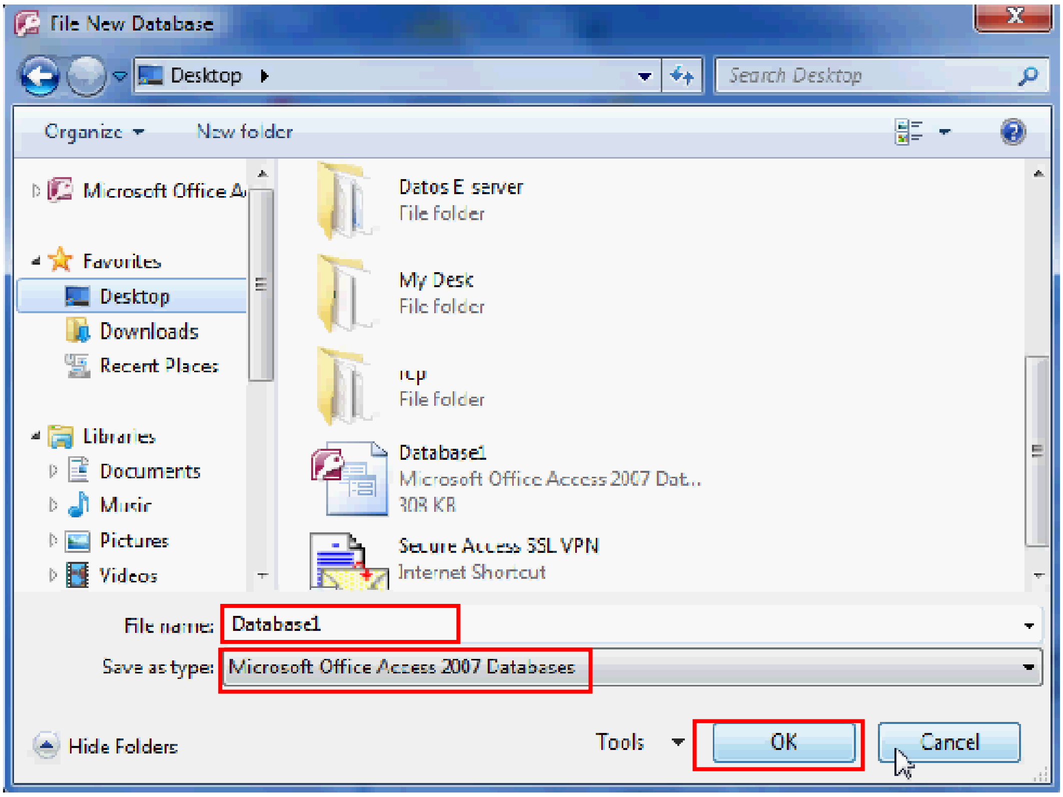
Blank Database

Create a Microsoft Office Access database that does not contain any existing data or objects.

File Name: Database1

C:\Users\rodrigo.carrillo\Documents\

Input the file name and select the file type as Access 2007, then confirm it.

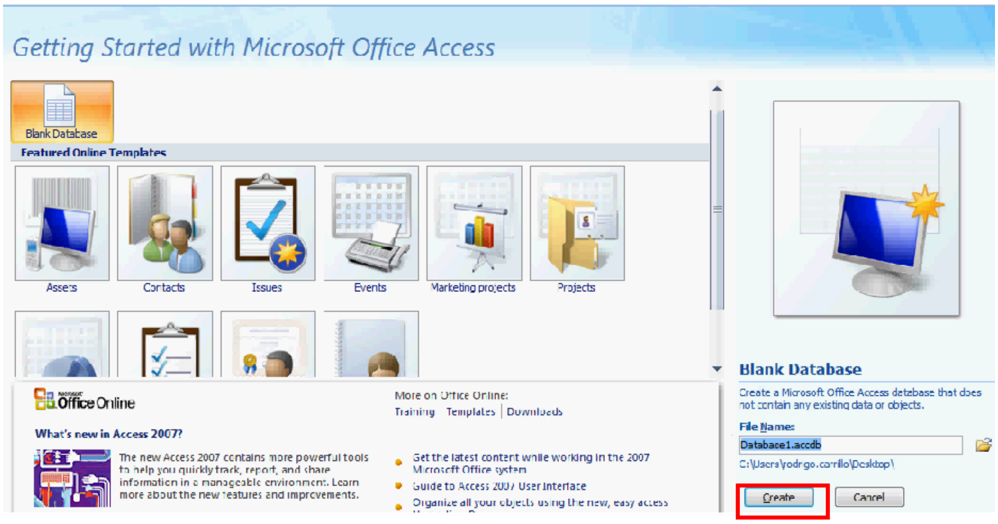


File New Database
Desktop
Search Desktop
Organize
New folder
Microsoft Office A
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Datos E server
File folder
My Desk
File folder
rcp
File folder
Database1
Microsoft Office Access 2007 Dat...
308 KB
Secure Access SSL VPN
Internet Shortcut
Hide Folders
Tools
OK
Cancel

File name: Database1

Save as type: Microsoft Office Access 2007 Databases

Click『Create』.


Getting Started with Microsoft Office Access
Blank Database
Featured Online Templates
Assets
Contacts
Issues
Events
Marketing projects
Projects
Office Online
More on Office Online:
Training | Templates | Downloads
What's new in Access 2007?
Create
Cancel

Blank Database

Create a Microsoft Office Access database that does not contain any existing data or objects.

File Name: Database1.accdb

C:\Users\yodrgo.carrillo\Desktop\

Edit the table name (Table1) and create data column (date, data1, data2).

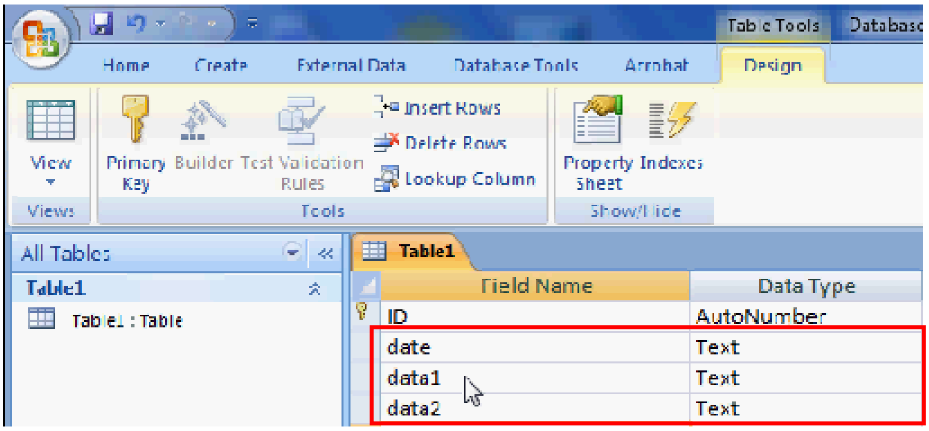


Table Tools
Home
Create
External Data
Database Tools
Acrobat
Design
View
Primary Key
Builder
Test Validation Rules
Insert Rows
Delete Rows
Lookup Column
Property Sheet
Indexes
Views
Tools
Show/Hide
All Tables
Table1
Table1 : Table

Field Name	Data Type
ID	AutoNumber
date	Text
data1	Text
data2	Text

Execute『Database Tool』➔『SQL Server』.

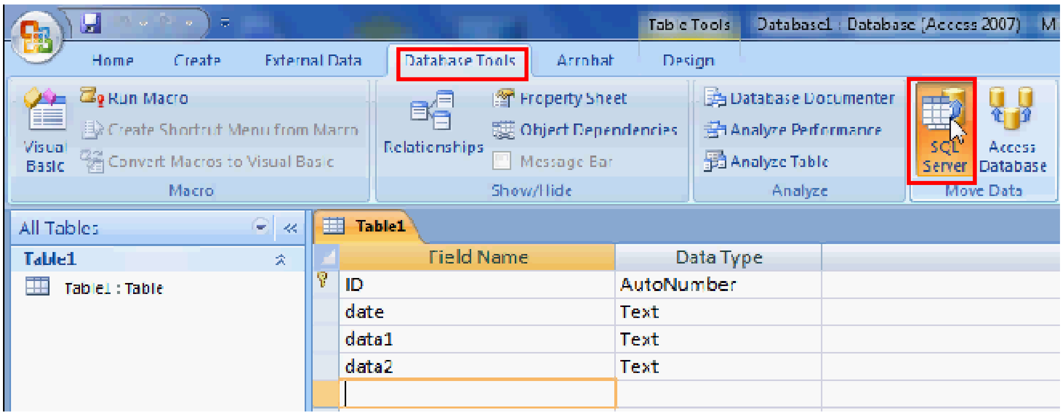
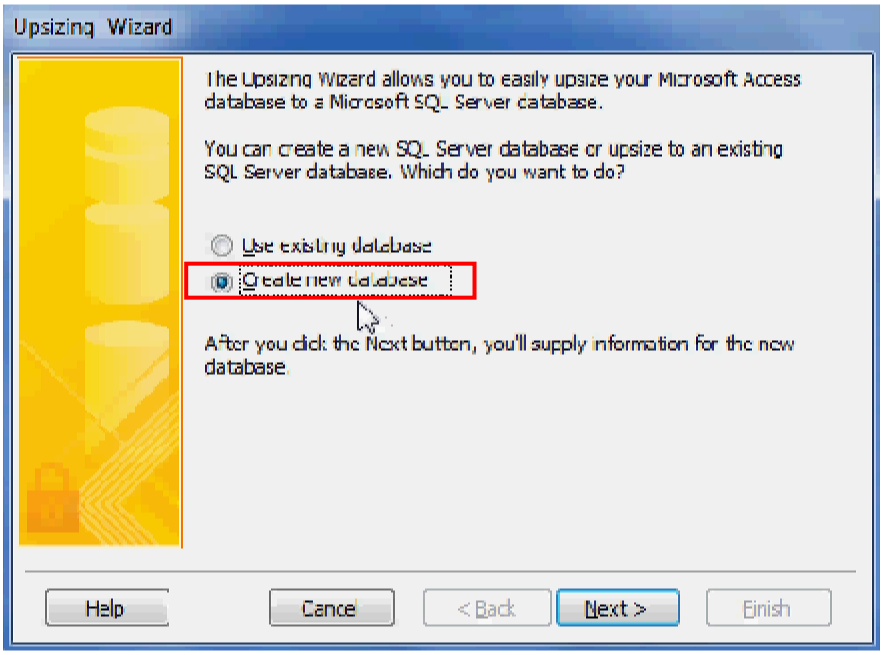


Table Tools
Database1 : Database (Access 2007)
Home
Create
External Data
Database Tools
Acrobat
Design
Visual Basic
Run Macro
Create Shortcut Menu from Macro
Convert Macros to Visual Basic
Macro
Relationships
Property Sheet
Object Dependencies
Message Bar
Show/Hide
Database Documenter
Analyze Performance
Analyze Table
Analyze
SQL Server
Access Database
Move Data
All Tables
Table1
Table1 : Table

Field Name	Data Type
ID	AutoNumber
date	Text
data1	Text
data2	Text

Select『Create New Database』and click『Next Step』.



The Upsizing Wizard allows you to easily upsize your Microsoft Access database to a Microsoft SQL Server database.

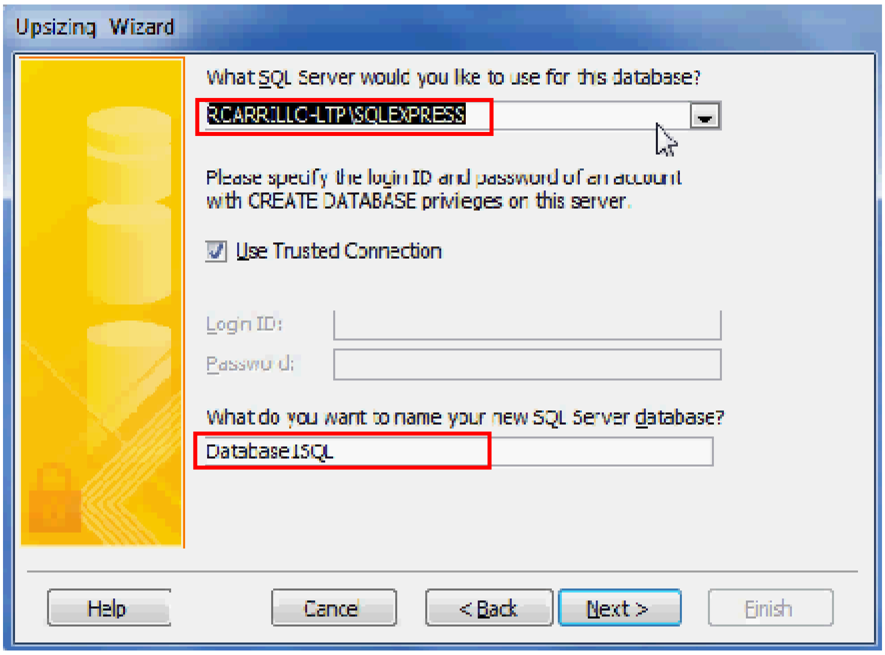
You can create a new SQL Server database or upsize to an existing SQL Server database. Which do you want to do?

○ Use existing database

● Create new database

After you click the Next button, you'll supply information for the new database.

Choose SQL Server instance to use, and input the name for new SQL Server Database which is transferred from Access 2007 database.



What SQL Server would you like to use for this database?

RCARRILLO-LTP\SQLEXPRESS

Please specify the login ID and password of an account with CREATE DATABASE privileges on this server.

☑ Use Trusted Connection

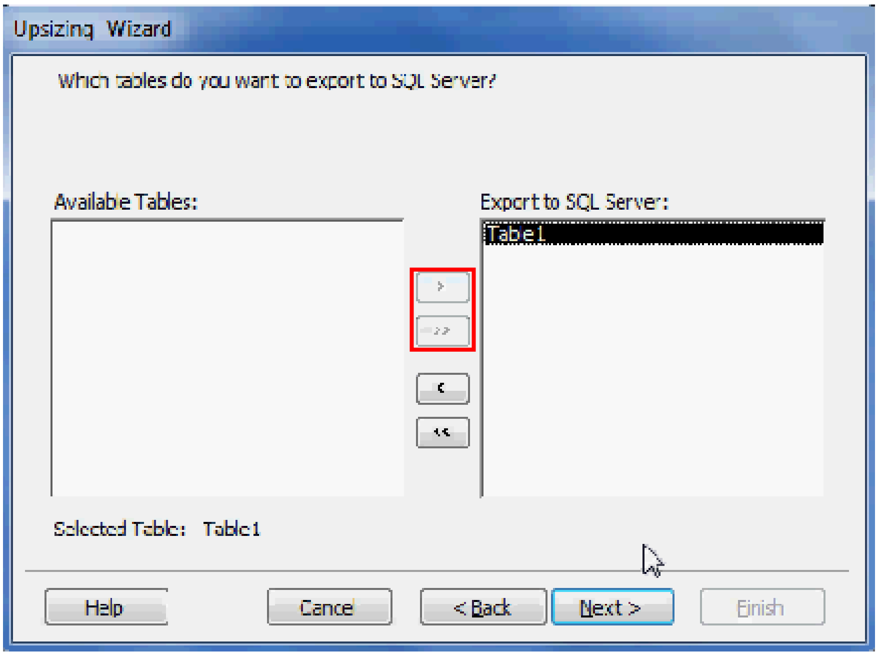
Login ID:

Password:

What do you want to name your new SQL Server database?

Database1SQL

Choose the table exporting to SQL Server. After choosing, click『>』.


Upsizing Wizard
>
>>
<
<<
Help
Cancel
< Back
Next >
Finish

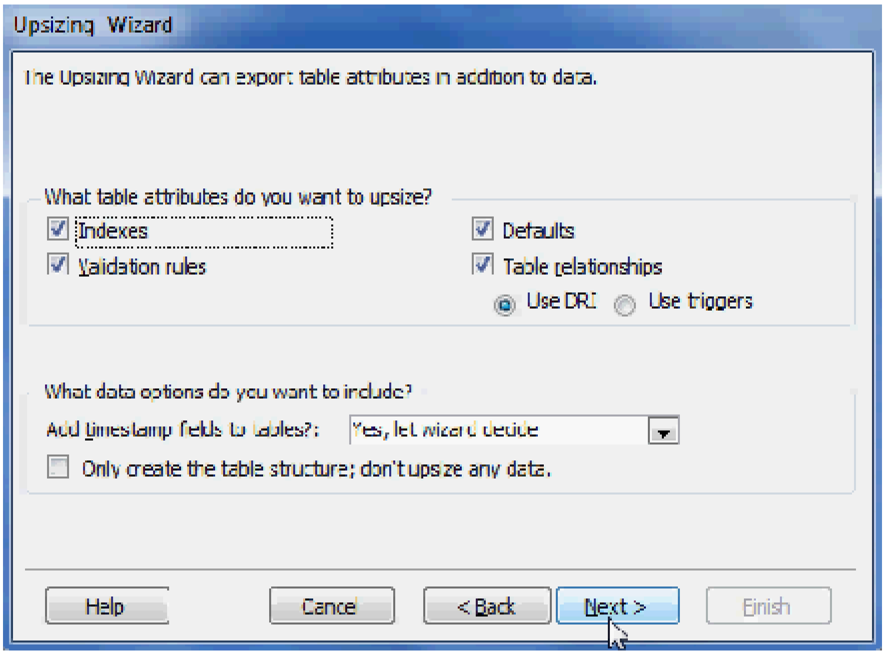
Which tables do you want to export to SQL Server?

Available Tables:

Export to SQL Server: Table1

Selected Table: Table1

Setup the attributes of the transfering table and click『Next』.


Upsizing Wizard
Help
Cancel
< Back
Next >
Finish

The Upsizing Wizard can export table attributes in addition to data.

What table attributes do you want to upsize?

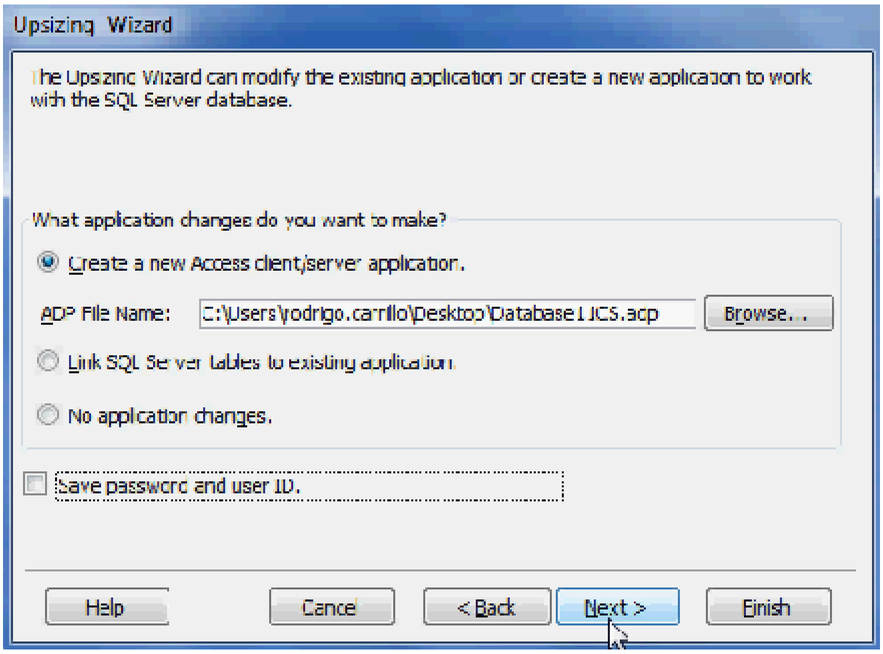
☑ Indexes
☑ Validation rules
☑ Defaults
☑ Table relationships
● Use DRI ○ Use triggers

What data options do you want to include?

Add timestamp fields to tables?: Yes, let wizard decide

☐ Only create the table structure; don't upsize any data.

Setup the operation of the transfering database and click『Next』.


Upsizing Wizard
Help
Cancel
< Back
Next >
Finish
Browse...

The Upsizing Wizard can modify the existing application or create a new application to work with the SQL Server database.

What application changes do you want to make?

◉ Create a new Access client/server application.

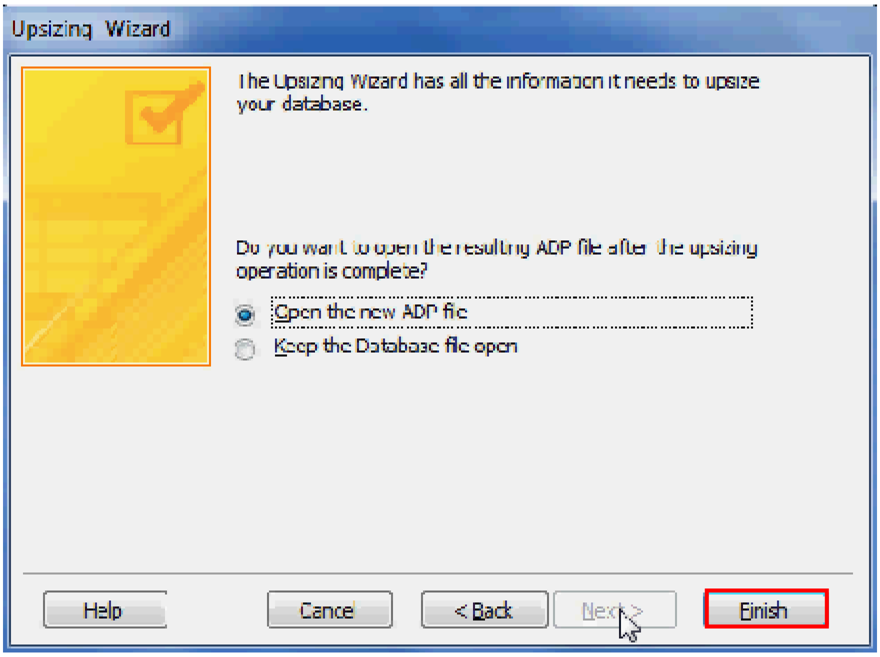
ADP File Name: C:\Users\rodrigo.carrillo\Desktop\Database1CS.adp

○ Link SQL Server tables to existing application.

○ No application changes.

☐ Save password and user ID.

Complete setup steps and click『Finish』.


Upsizing Wizard
Help
Cancel
< Back
Next >
Finish

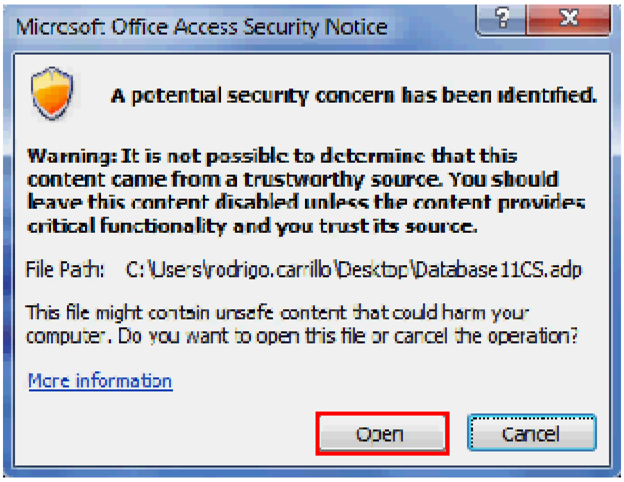
The Upsizing Wizard has all the information it needs to upsize your database.

Do you want to open the resulting ADP file after the upsizing operation is complete?

◉ Open the new ADP file

○ Keep the Database file open

After finishing setup steps and the below window will show, then click『Open』.


Microsoft Office Access Security Notice
?
X
Open
Cancel

A potential security concern has been identified.

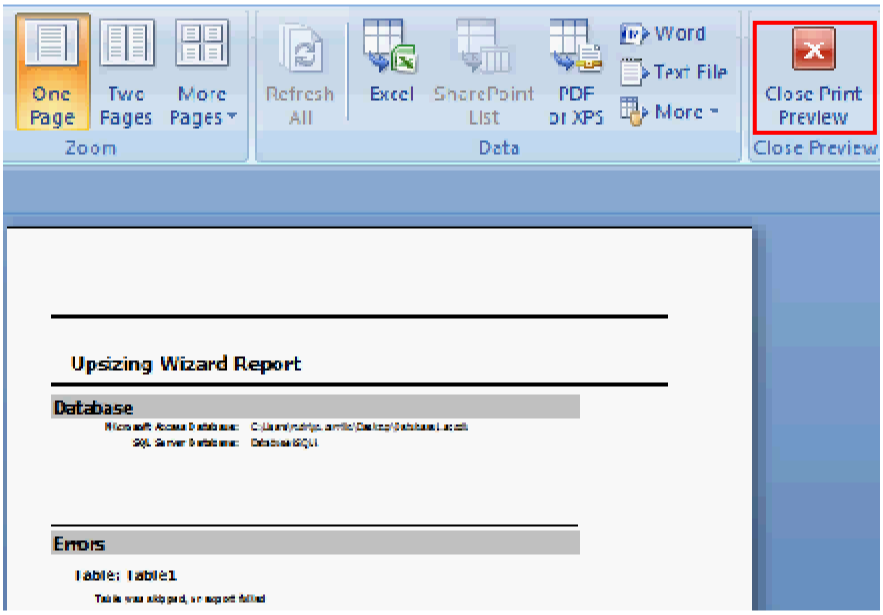
Warning: It is not possible to determine that this content came from a trustworthy source. You should leave this content disabled unless the content provides critical functionality and you trust its source.

File Path: C:\Users\rodrigo.carrillo\Desktop\Database11CS.adp

This file might contain unsafe content that could harm your computer. Do you want to open this file or cancel the operation?

More information

SQL transfering reporting will turn up and close it.


One Page
Two Pages
More Pages
Zoom
Refresh All
Excel
SharePoint List
PDF or XPS
Word
Text File
More
Data
Close Print Preview
Close Preview

Upsizing Wizard Report

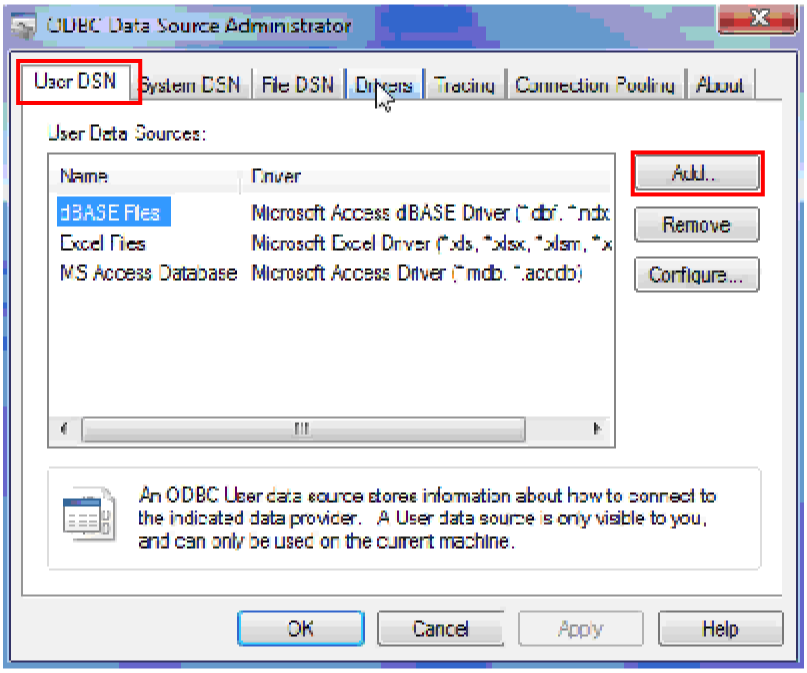
Database

Errors

Table: Table1

6. ODBC Setting：

Click 『Control Panel』➔『Administrative Tools』➔『Data Source(ODBC)』, then enter the 『User DSN』and add a new item.

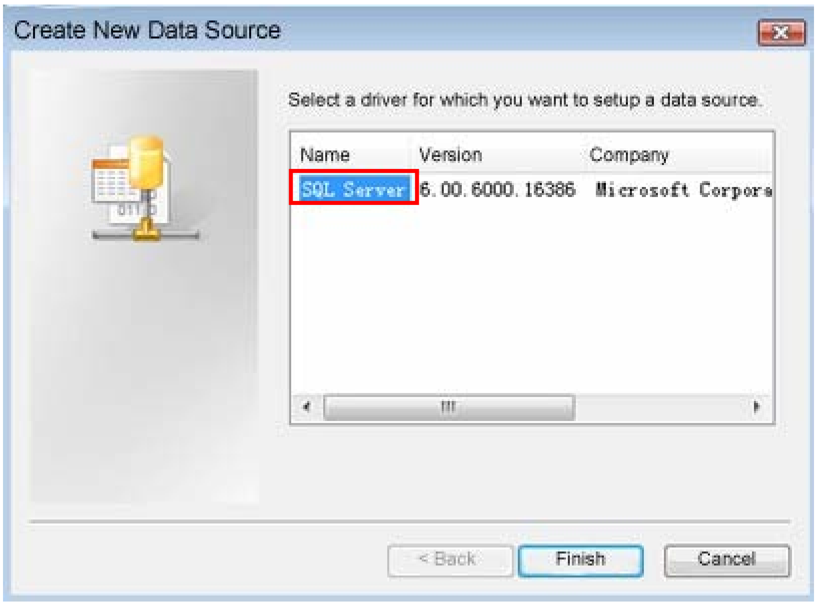

ODBC Data Source Administrator
User DSN
System DSN
File DSN
Drivers
Tracing
Connection Pooling
About
Add...
Remove
Configure...
OK
Cancel
Apply
Help

User Data Sources:

Name	Driver
dBASE Files	Microsoft Access dBASE Driver (*.dbf, *.ndx
Excel Files	Microsoft Excel Driver (*.xls, *.xlsx, *.xlsm, *.x
MS Access Database	Microsoft Access Driver (*.mdb, *.accdb)

An ODBC User data source stores information about how to connect to the indicated data provider. A User data source is only visible to you, and can only be used on the current machine.

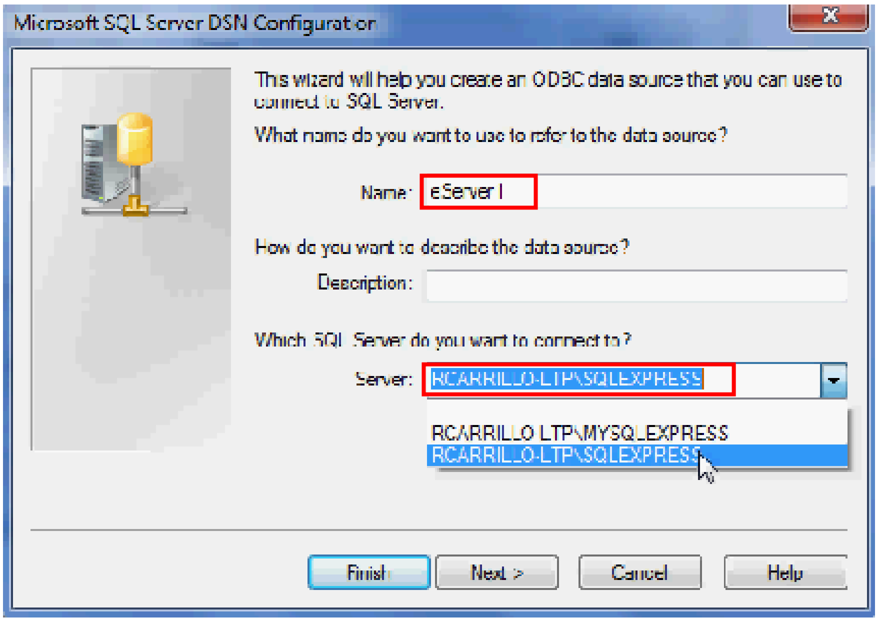
Choose『SQL Server』as the driver for DSN.


Create New Data Source
< Back
Finish
Cancel

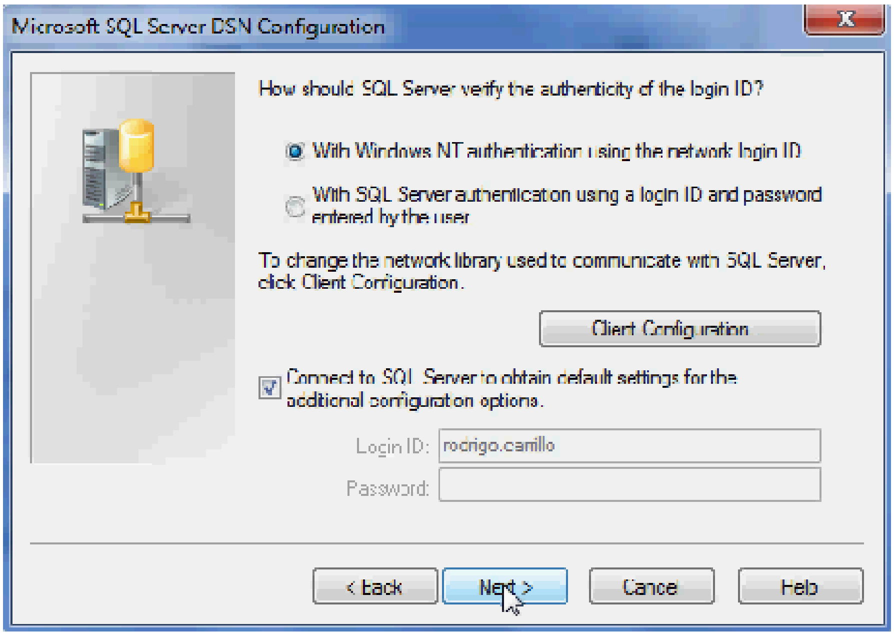
Select a driver for which you want to setup a data source.

Name	Version	Company
SQL Server	6.00.6000.16386	Microsoft Corpora

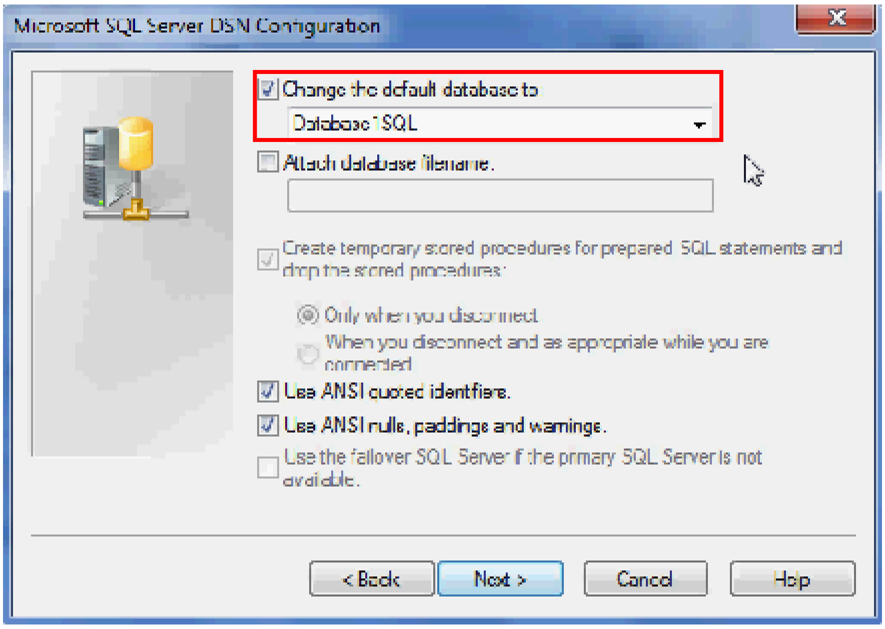
Input the name of ODBC and select connecting SQL Server.


Microsoft SQL Server DSN Configuration
This wizard will help you create an ODBC data source that you can use to connect to SQL Server.
What name do you want to use to refer to the data source?
Name: eServer I
How do you want to describe the data source?
Description:
Which SQL Server do you want to connect to?
Server: RCARRILLO-LTP\SQLEXPRESS
RCARRILLO-LTP\MYSQLEXPRESS
RCARRILLO-LTP\SQLEXPRESS
Finish
Next >
Cancel
Help

Choose the authentication method show as below figure and click『Next』.


Microsoft SQL Server DSN Configuration
How should SQL Server verify the authenticity of the login ID?
● With Windows NT authentication using the network login ID
○ With SQL Server authentication using a login ID and password entered by the user
To change the network library used to communicate with SQL Server, click Client Configuration.
Client Configuration
☑ Connect to SQL Server to obtain default settings for the additional configuration options.
Login ID: rodrigo.carrillo
Password:
< Back
Next >
Cancel
Help

Choose the corresponding database to be the default database.



Microsoft SQL Server DSN Configuration

☑ Change the default database to:

Database1SQL

☐ Attach database filename:

☑ Create temporary stored procedures for prepared SQL statements and drop the stored procedures:

● Only when you disconnect

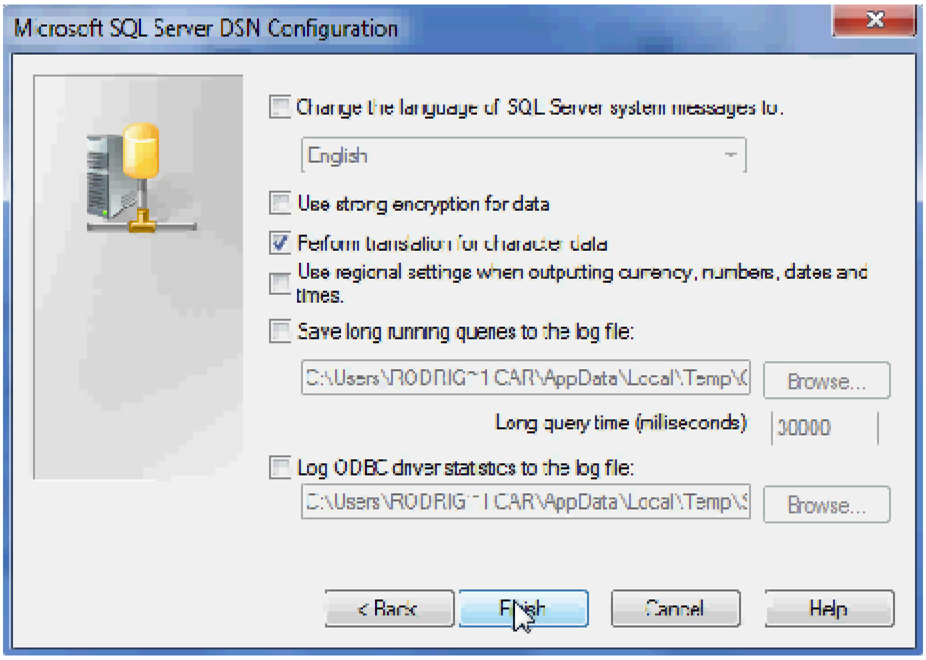
○ When you disconnect and as appropriate while you are connected

☑ Use ANSI quoted identifiers.

☑ Use ANSI nulls, paddings and warnings.

☐ Use the failover SQL Server if the primary SQL Server is not available.

Setup as below figure and click『Finish』to finish the ODBC setup.



Microsoft SQL Server DSN Configuration

☐ Change the language of SQL Server system messages to:

English

☐ Use strong encryption for data

☑ Perform translation for character data

☐ Use regional settings when outputting currency, numbers, dates and times.

☐ Save long running queries to the log file:

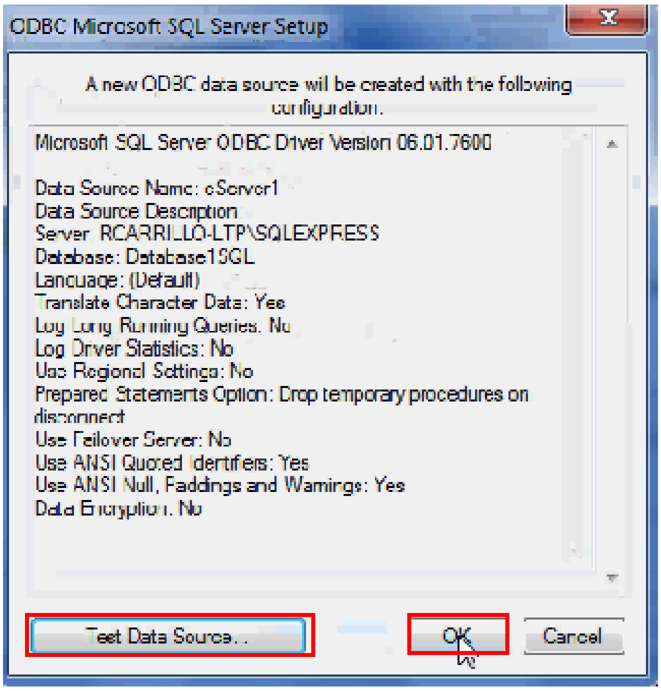
C:\Users\RODRIG~1.CAR\AppData\Local\Temp\

Long query time (miliseconds): 30000

☐ Log ODBC driver statistics to the log file:

C:\Users\RODRIG~1.CAR\AppData\Local\Temp\

ODBC setup completes and can testing DSN.



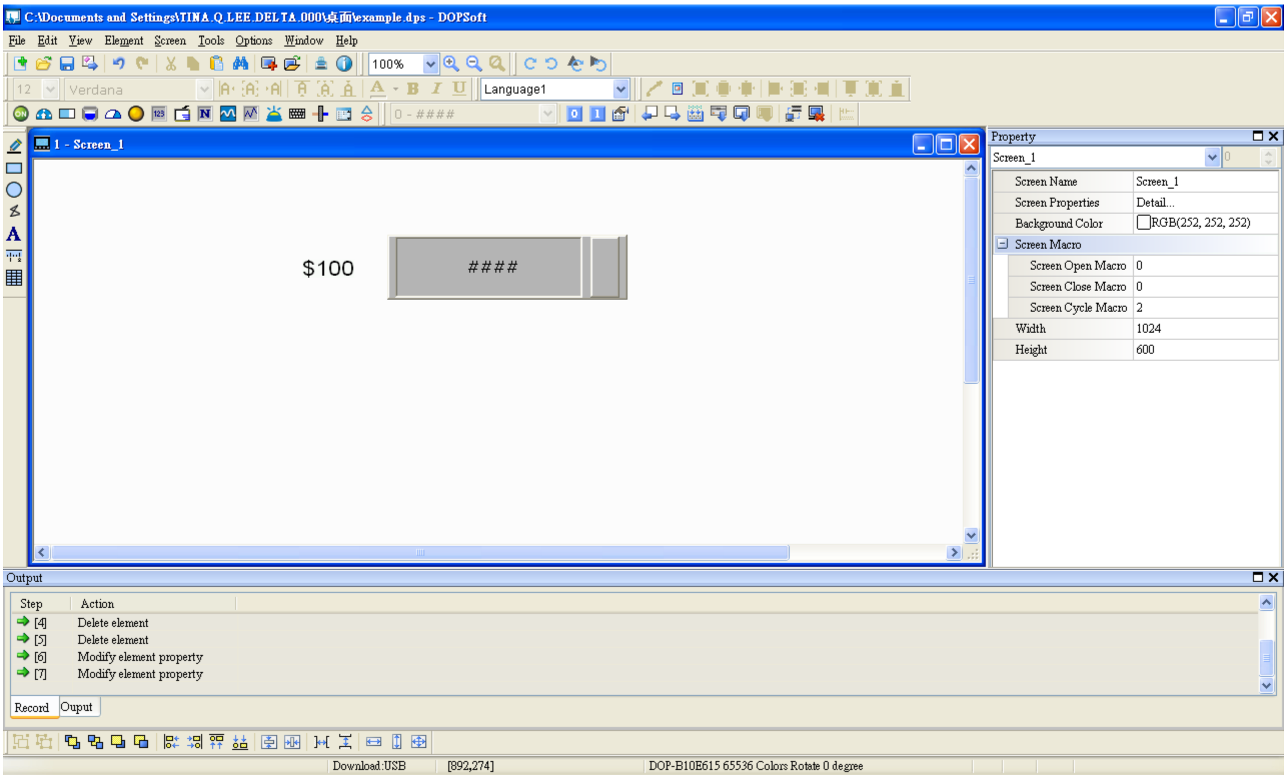
A new ODBC data source will be created with the following configuration:

Microsoft SQL Server ODBC Driver Version 06.01.7600

Data Source Name: eServer1
Data Source Description:
Server: RCARRILLO-LTP\SQLEXPRESS
Database: Database1SQL
Language: (Default)
Translate Character Data: Yes
Log Long Running Queries: No
Log Driver Statistics: No
Use Regional Settings: No
Prepared Statements Option: Drop temporary procedures on disconnect
Use Failover Server: No
Use ANSI Quoted Identifiers: Yes
Use ANSI Null, Paddings and Warnings: Yes
Data Encryption: No

8.1.2 Create HMI Project File

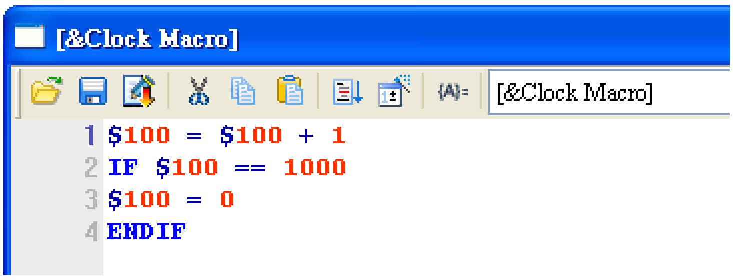
Start DOPSoft software program and click 『File』 ➔ 『New』 to create a new project. Then, click『Element』 ➔ 『Input』 ➔ 『Numeric Entry』 to create a numeric entry element ($100) on the screen. In this case, B10E615 series HMI is used.


C:\Documents and Settings\TINA.Q.LEE.DELTA.000\桌面\example.dps - DOPSoft
File Edit View Element Screen Tools Options Window Help
100%
12
Verdana
Language1
0 - ####
1 - Screen_1
$100
####
Property
Screen_1
Output
Record
Ouput
Download:USB
[892,274]
DOP-B10E615 65536 Colors Rotate 0 degree

Screen Name	Screen_1
Screen Properties	Detail...
Background Color	RGB(252, 252, 252)
Screen Macro	
Screen Open Macro	0
Screen Close Macro	0
Screen Cycle Macro	2
Width	1024
Height	600

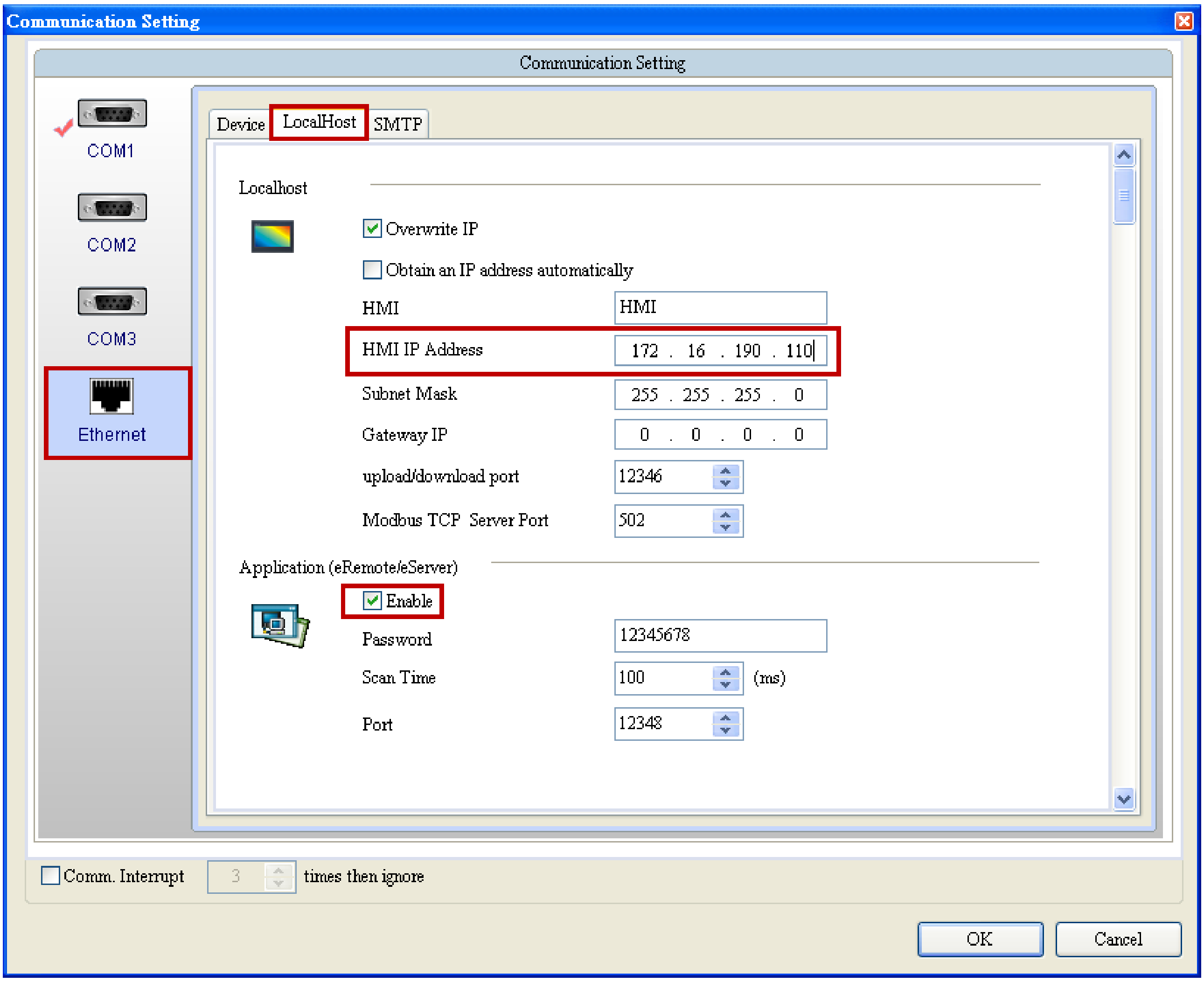
Step	Action
[4]	Delete element
[5]	Delete element
[6]	Modify element property
[7]	Modify element property

Use Screen Cycle Macro and enter the following commands in macro command window.


[&Clock Macro]
[&Clock Macro]

```
$100 = $100 + 1
IF $100 == 1000
$100 = 0
ENDIF
```

Click **Options > Communication Setting > Ethernet > LocalHost,** set HMI IP Address and check the Application(eRemote / eServer) function **Enable.** Then, press **OK** button to finish the settings.


Communication Setting
Communication Setting
COM1
COM2
COM3
Ethernet
Device
LocalHost
SMTP
OK
Cancel

Localhost

☑ Overwrite IP

☐ Obtain an IP address automatically

HMI: HMI

HMI IP Address: 172 . 16 . 190 . 110

Subnet Mask: 255 . 255 . 255 . 0

Gateway IP: 0 . 0 . 0 . 0

upload/download port: 12346

Modbus TCP Server Port: 502

Application (eRemote/eServer)

☑ Enable

Password: 12345678

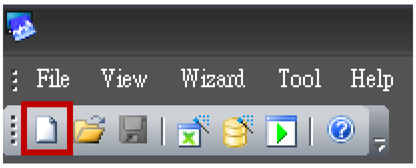
Scan Time: 100 (ms)

Port: 12348

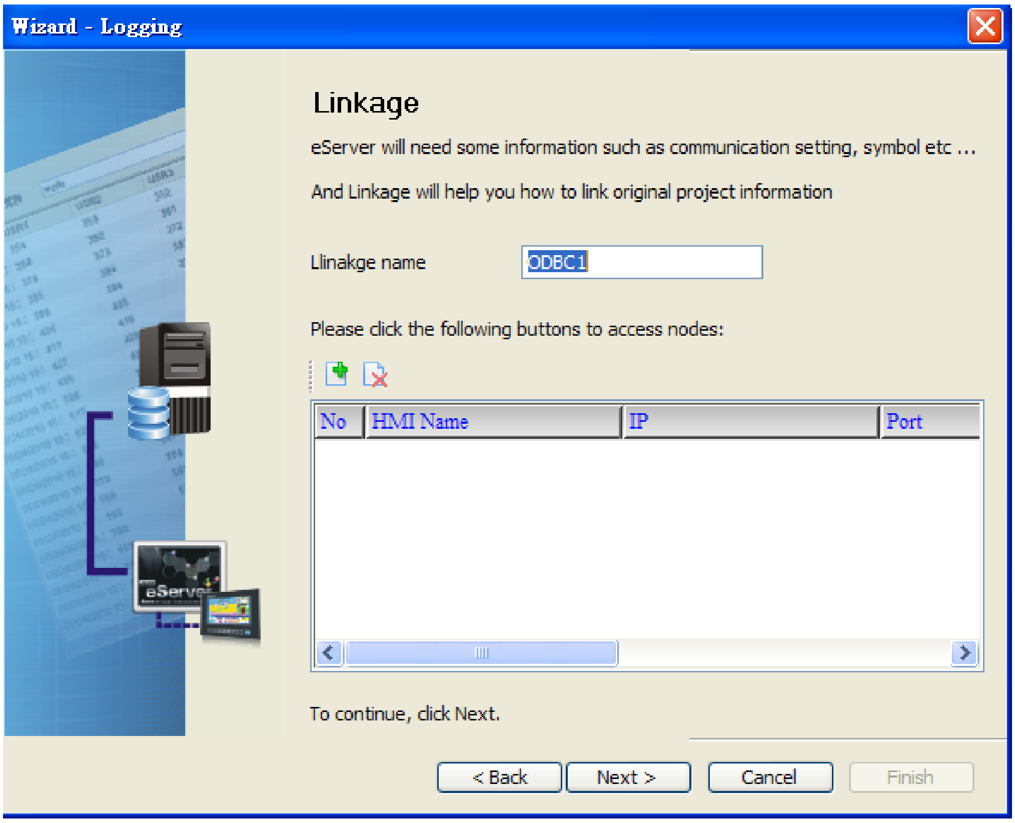
☐ Comm. Interrupt 3 times then ignore

8.1.3 eServer Setting

Open a new Logging (ODBC) project file.


File
View
Wizard
Tool
Help

Click New icon to access nodes (link to HMI).


Wizard - Logging
< Back
Next >
Cancel
Finish

Linkage

eServer will need some information such as communication setting, symbol etc ...

And Linkage will help you how to link original project information

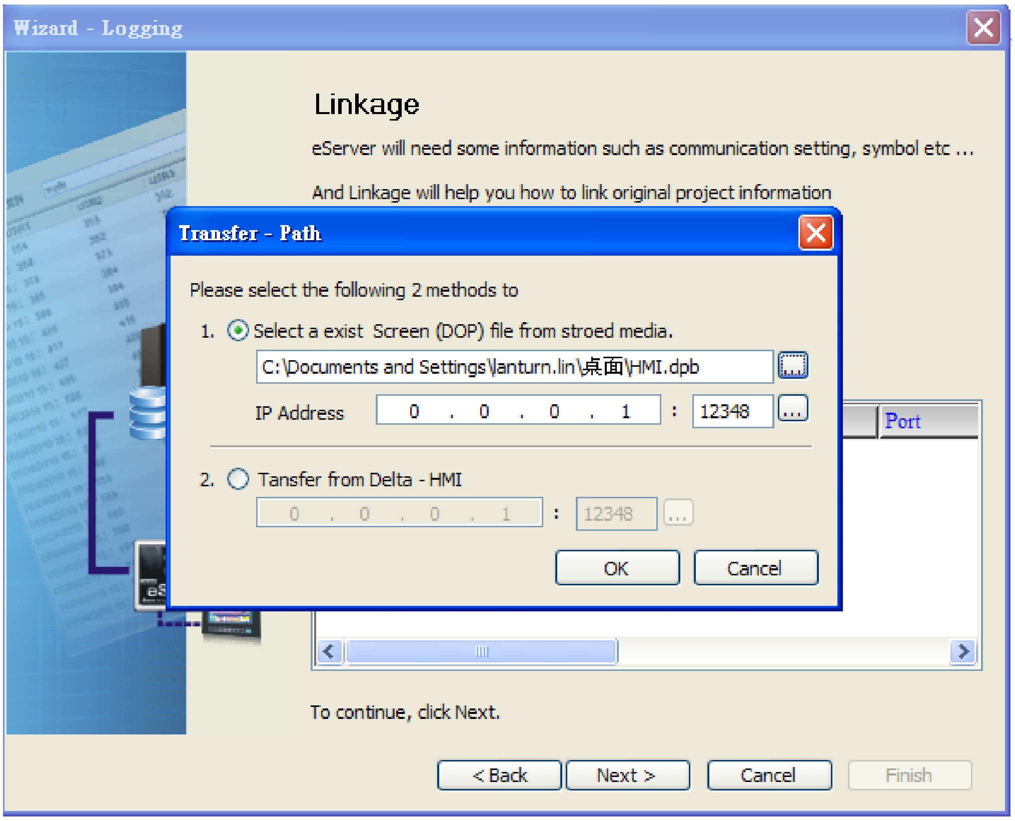
Llinakge name ODBC1

Please click the following buttons to access nodes:

No	HMI Name	IP	Port

To continue, click Next.

Choose a HMI screen project file to link with this eServer project.


Wizard - Logging
Port
< Back
Next >
Cancel
Finish
Transfer - Path
OK
Cancel

Linkage

eServer will need some information such as communication setting, symbol etc ...

And Linkage will help you how to link original project information

Please select the following 2 methods to

1. ● Select a exist Screen (DOP) file from stroed media.

C:\Documents and Settings\lanturn.lin\桌面\HMI.dpb

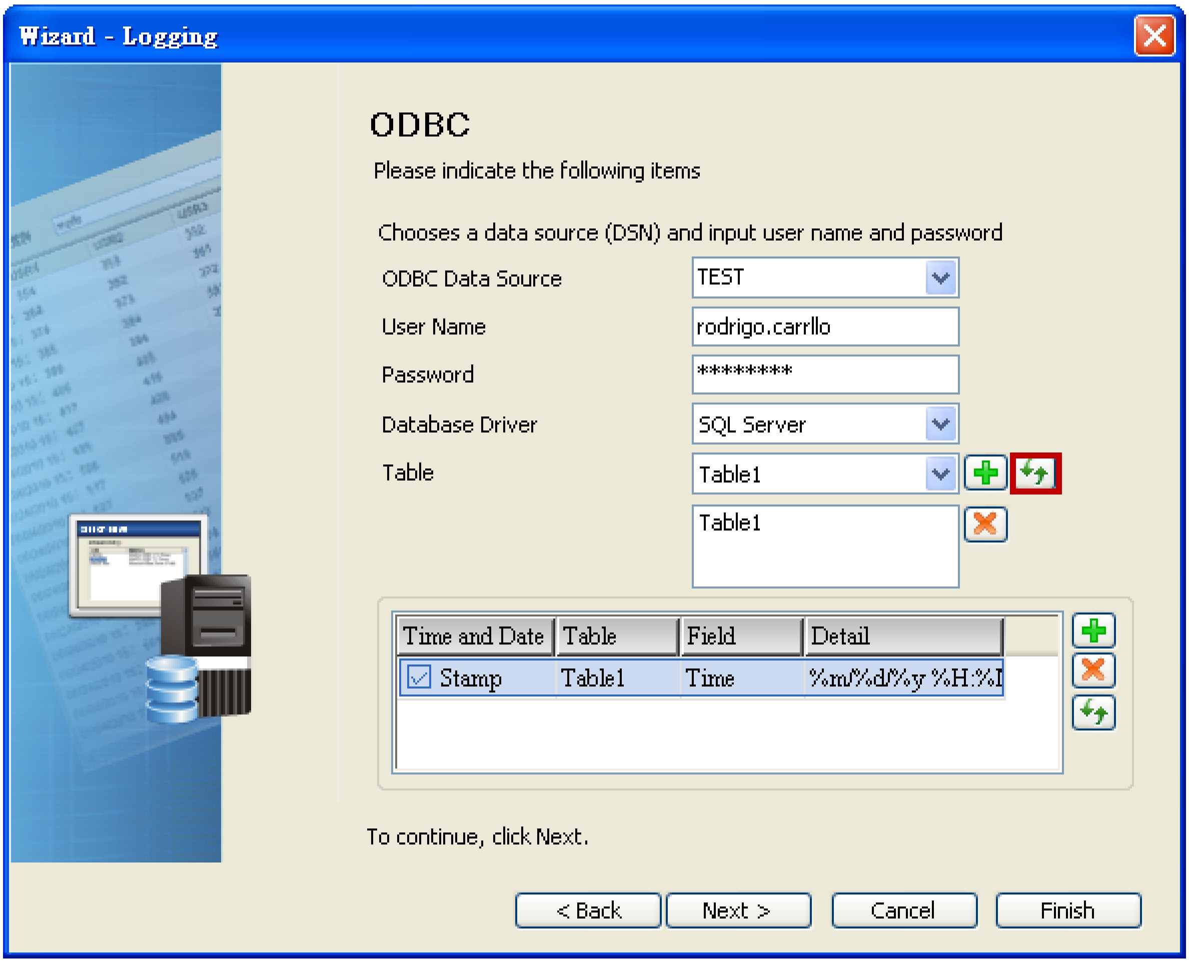
IP Address 0 . 0 . 0 . 1 : 12348

2. ○ Tansfer from Delta - HMI

0 . 0 . 0 . 1 : 12348

To continue, click Next.

ODBC Data Source Setting: input the ODBC Data Source name, account and password. Press the refresh button and select the table name and click『+』, then chooses the field as below figure.



ODBC

Please indicate the following items

Chooses a data source (DSN) and input user name and password

ODBC Data Source: TEST

User Name: rodrigo.carrllo

Password: ********

Database Driver: SQL Server

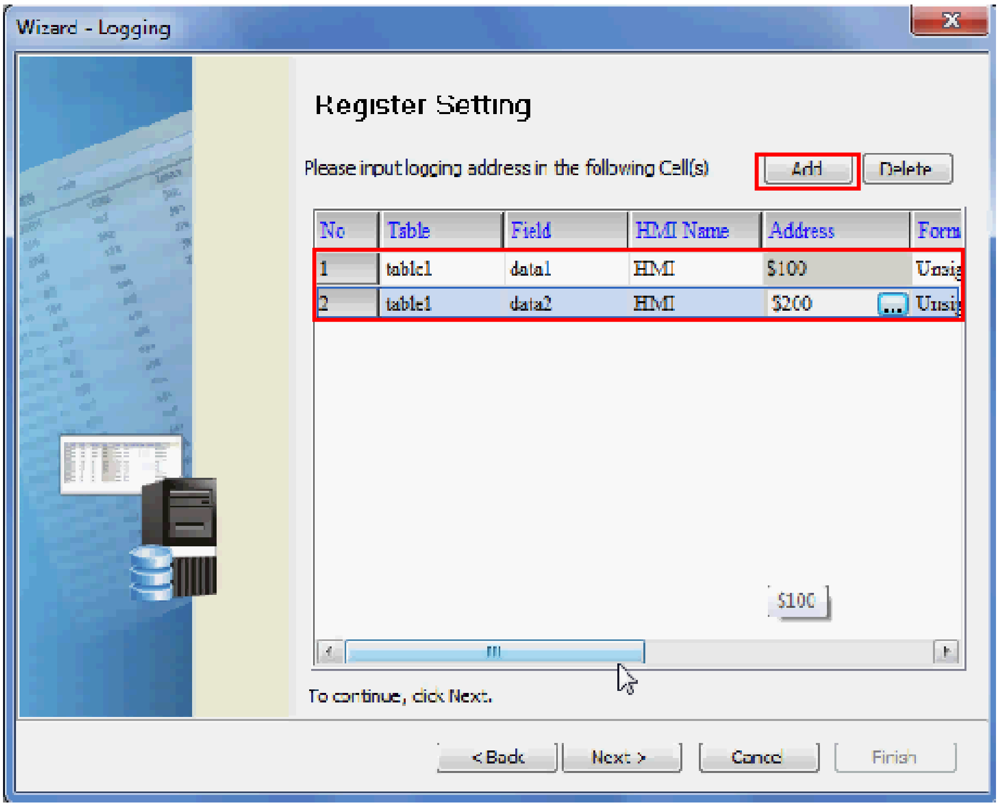
Table: Table1

Table1

Time and Date	Table	Field	Detail
☑ Stamp	Table1	Time	%m/%d/%y %H:%I

To continue, click Next.

Set the register address to the corresponding field as below figure.


Wizard - Logging
Add
Delete
$100
< Back
Next >
Cancel
Finish

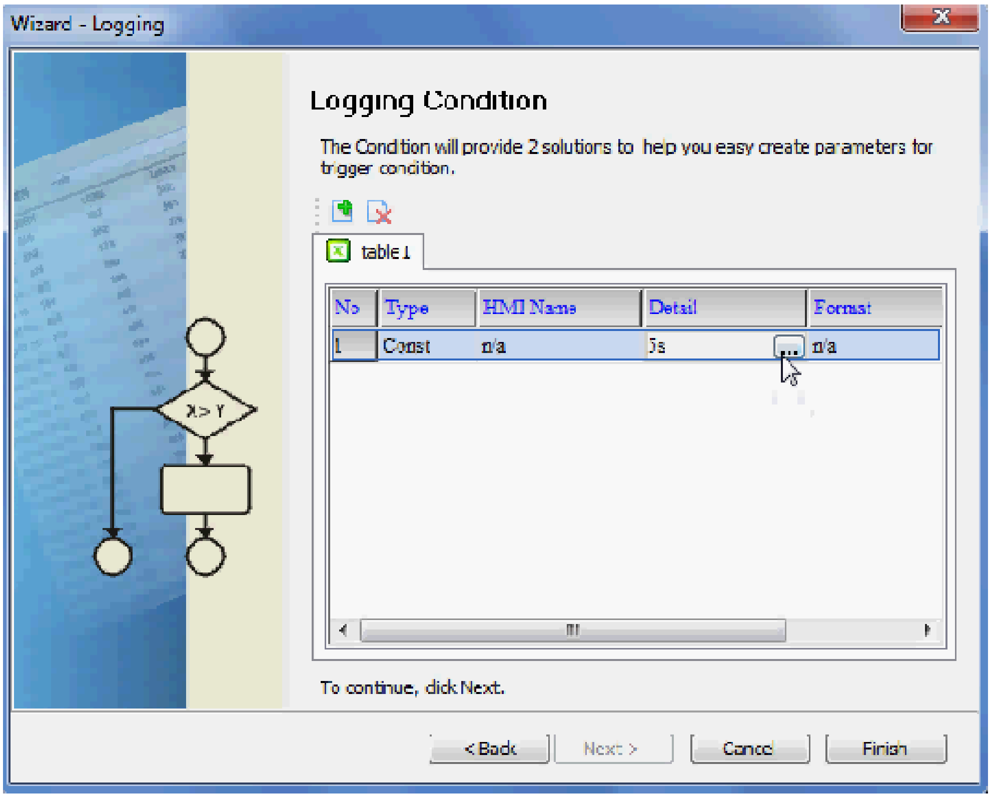
Register Setting

Please input logging address in the following Cell(s)

No	Table	Field	HMI Name	Address	Form
1	table1	data1	HMI	$100	Unsig
2	table1	data2	HMI	$200	Unsi

To continue, click Next.

Set the sampling conditions as constant, and set the value as 5s.


Wizard - Logging
table1
X > Y
< Back
Next >
Cancel
Finish

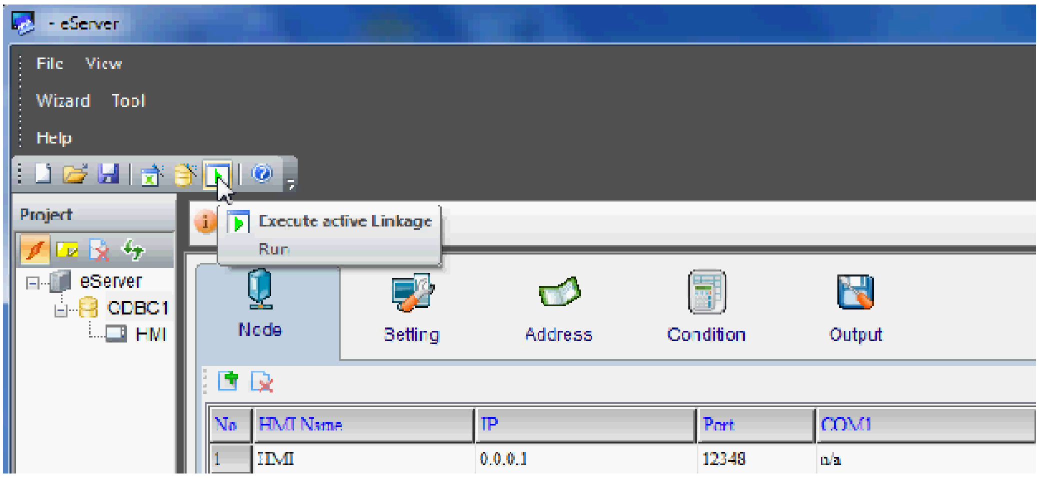
Logging Condition

The Condition will provide 2 solutions to help you easy create parameters for trigger condition.

No	Type	HMI Name	Detail	Format
1	Const	n/a	5s	n/a

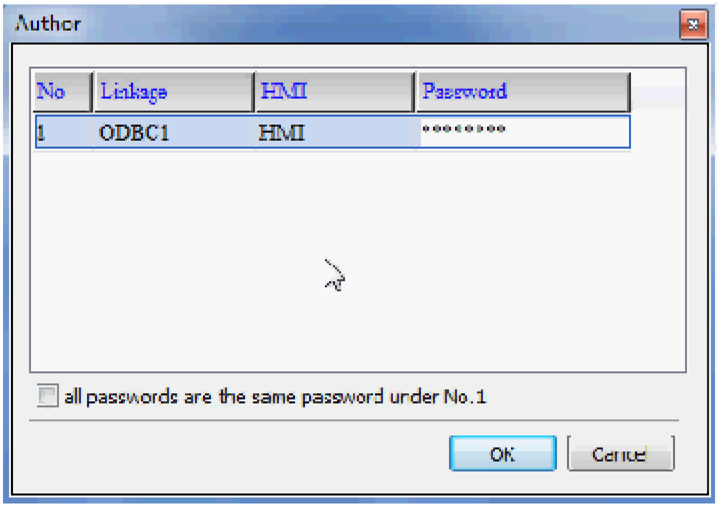
To continue, click Next.

Save and Execute.


- eServer
File
View
Wizard
Tool
Help
Project
Execute active Linkage
Run
eServer
ODBC1
HMI
Node
Setting
Address
Condition
Output

No	HMI Name	IP	Port	COM1
1	HMI	0.0.0.1	12348	n/a

After the password is entered, the system will start sampling operation and write data in Microsoft Access.

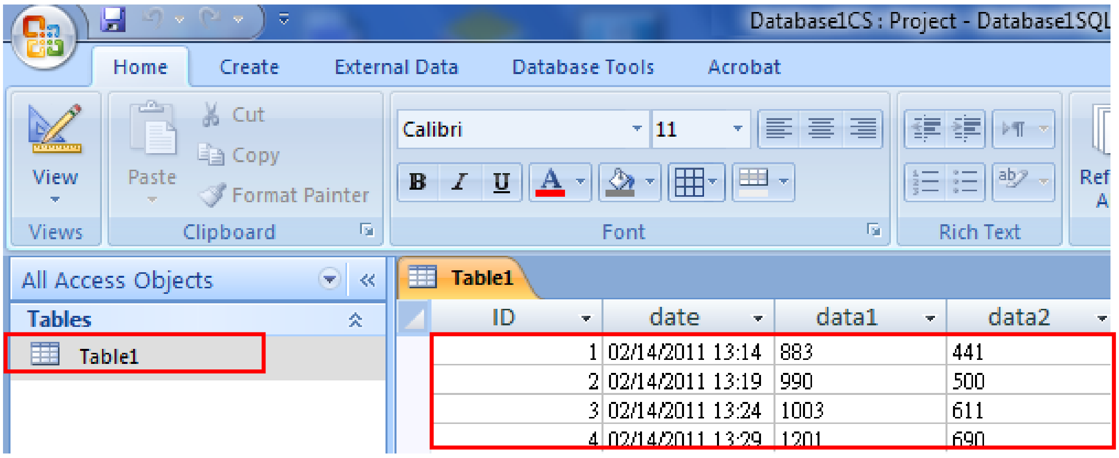

Author
OK
Cancel

No	Linkage	HMI	Password
1	ODBC1	HMI	*********

☐ all passwords are the same password under No.1

eServer Logging Database：

We can see that a『Database1SQL』file is existed in the folder as the original created access 2007 file in. Logging data shows as below figure.


Database1CS : Project - Database1SQL
Home
Create
External Data
Database Tools
Acrobat
View
Views
Paste
Cut
Copy
Format Painter
Clipboard
Calibri
11
Font
Rich Text
Ref
A
All Access Objects
Tables
Table1
Table1

ID	date	data1	data2
1	02/14/2011 13:14	883	441
2	02/14/2011 13:19	990	500
3	02/14/2011 13:24	1003	611
4	02/14/2011 13:29	1201	690

This page intentionally left blank

Chapter 9 Writing Data in MySQL

Before creating testing example, make sure to change the upload and download option (**Options > Environment**) on DOPSoft first. The default setting of upload and download is via **USB**. If the users need to use **Ethernet**, please change the default setting by referring to **Appendix A**.

9.1 Example

This example is used to help the users to understand how to use eServer to read the data of the register addresses $3 and $6 every second, record the data in MySQL via ODBC interface, and save the collected data into the specified folder (C:\Data).

9.1.1 Software Installation

1. AppServ Introduction

AppServ is a free and full-featured software of Apache HTTP Server, MySQL, PHP, and phpMyAdmin. To download it, go to http://www.appservnetwork.com.

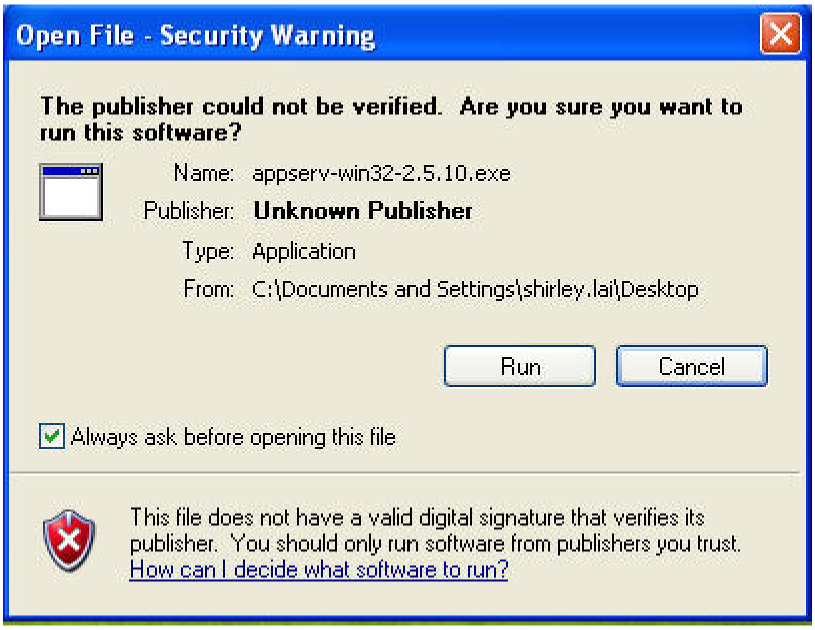
Package of AppServ

- Apache HTTP Server: It is a free and open source HTTP Server.
- MySQL: It is a relational database management system.
- PHP: It is a free and general-purpose scripting language designed for web development.
- phpMyAdmin: It is web-based open source tool written in PHP for MySQL database management.

After double clicking the appserv-win32-2.5.10.exe file downloaded from the website exe file, the following dialog box will appear.

AppServ Open Project

http://www.appservnetwork.com



Open File - Security Warning

The publisher could not be verified. Are you sure you want to run this software?

Name: appserv-win32-2.5.10.exe

Publisher: Unknown Publisher

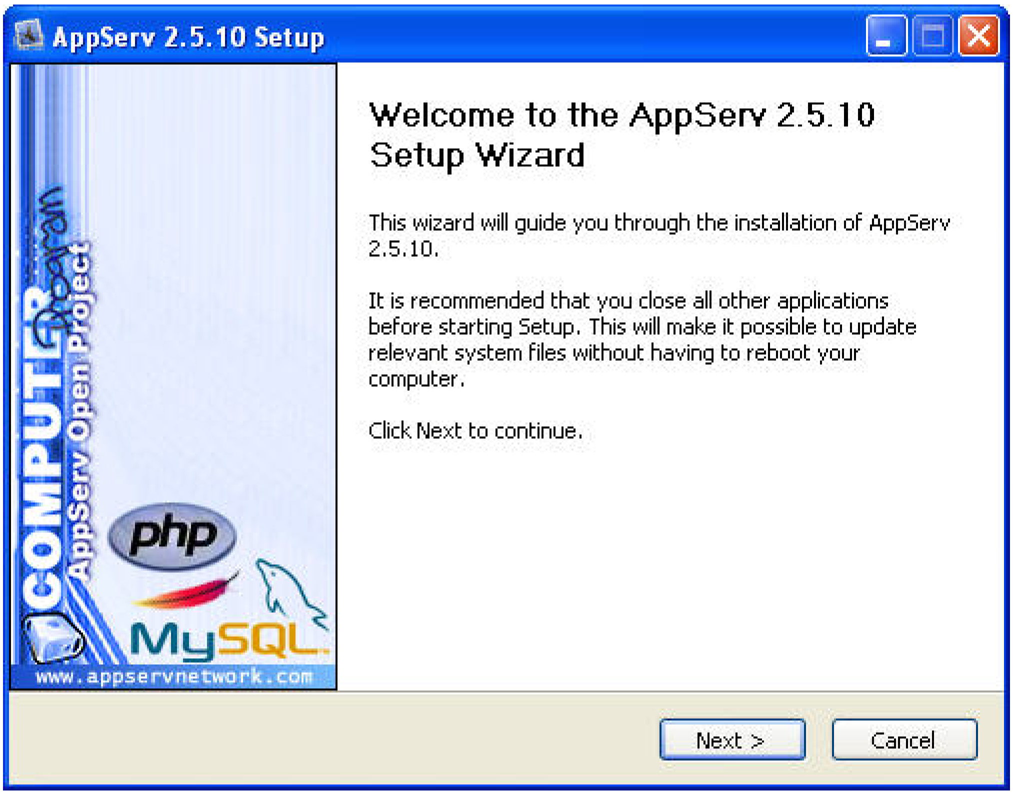
Type: Application

From: C:\Documents and Settings\shirley.lai\Desktop

☑ Always ask before opening this file

This file does not have a valid digital signature that verifies its publisher. You should only run software from publishers you trust. How can I decide what software to run?

Click on **Run** button to install AppServ.



AppServ 2.5.10 Setup

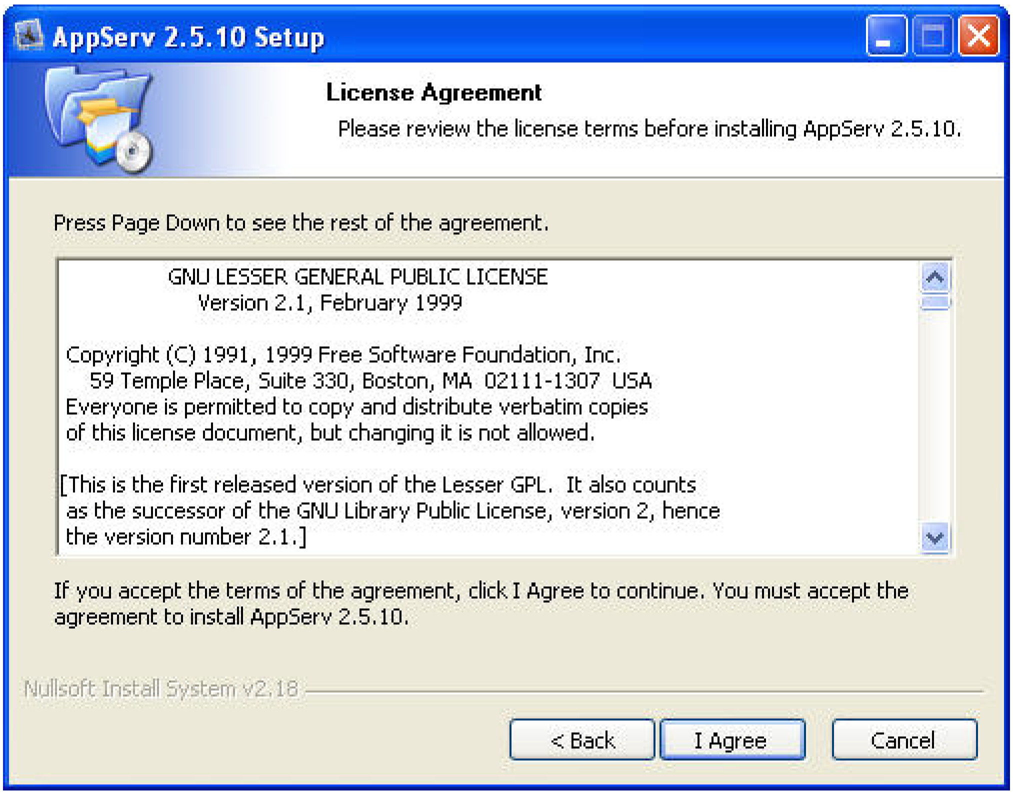
Welcome to the AppServ 2.5.10 Setup Wizard

This wizard will guide you through the installation of AppServ 2.5.10.

It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.

Click Next to continue.

Click on **Next** button to go to the next step.



License Agreement

Please review the license terms before installing AppServ 2.5.10.

Press Page Down to see the rest of the agreement.

GNU LESSER GENERAL PUBLIC LICENSE
Version 2.1, February 1999

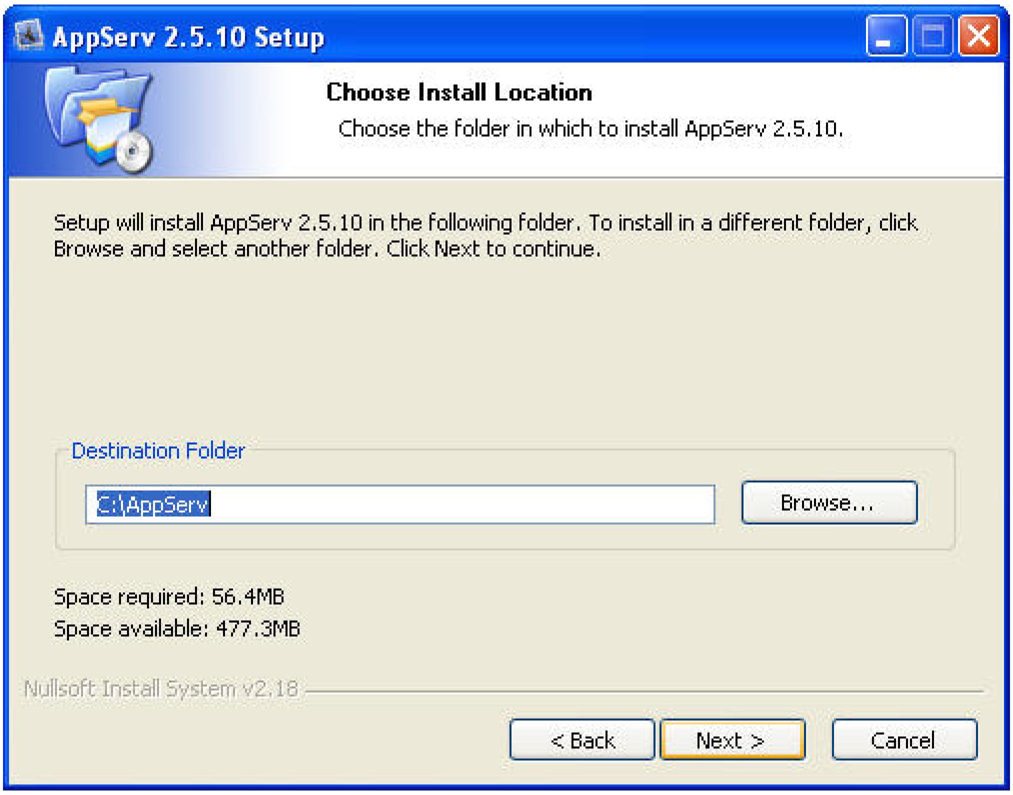
Copyright (C) 1991, 1999 Free Software Foundation, Inc.
59 Temple Place, Suite 330, Boston, MA 02111-1307 USA
Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts
as the successor of the GNU Library Public License, version 2, hence
the version number 2.1.]

If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install AppServ 2.5.10.

Nullsoft Install System v2.18

The users must read license agreement before installation. Click on **I Agree** button to continue.



Choose Install Location

Choose the folder in which to install AppServ 2.5.10.

Setup will install AppServ 2.5.10 in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.

Destination Folder

C:\AppServ

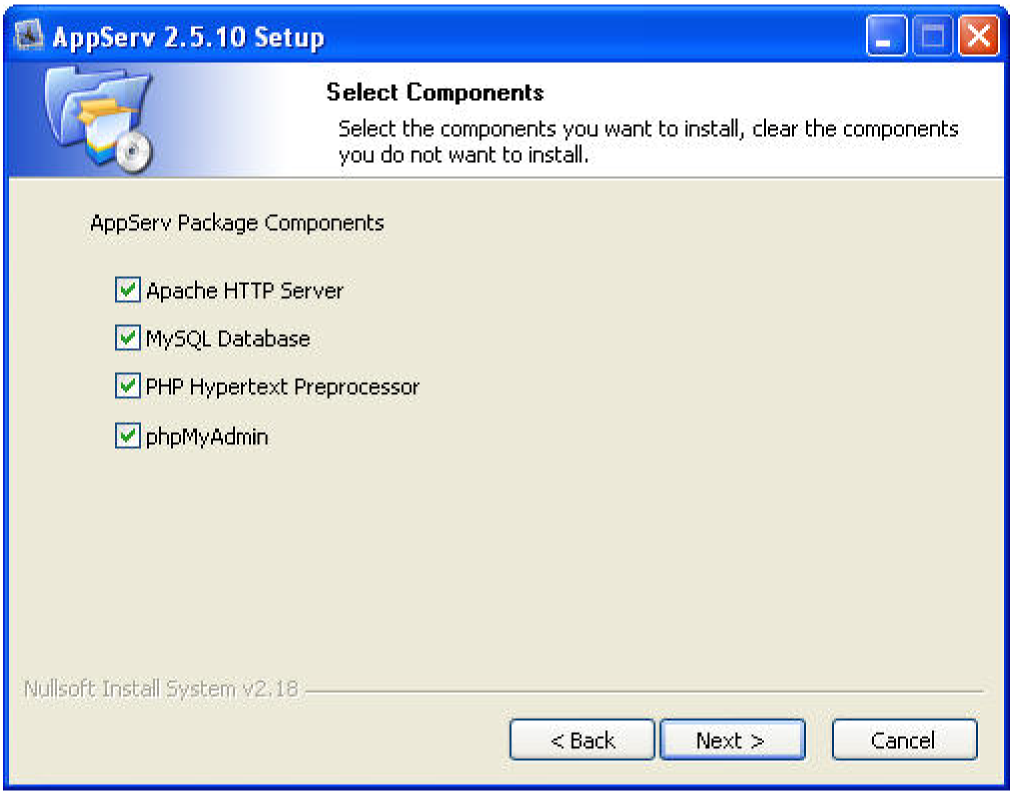
Space required: 56.4MB

Space available: 477.3MB

Nullsoft Install System v2.18

Select the default directory C:\AppServ, and click on **Next** button for the next step.

To select a directory other than the default directory, click **Browse**.


AppServ 2.5.10 Setup
Nullsoft Install System v2.18
< Back
Next >
Cancel

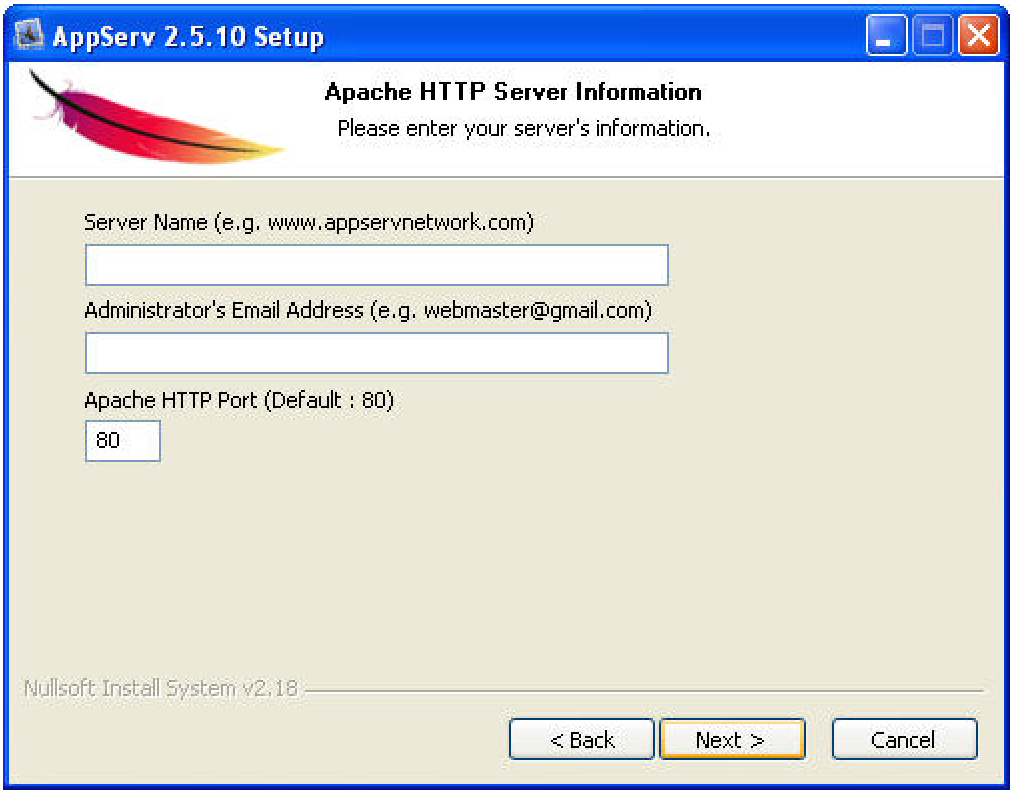
Select Components

Select the components you want to install, clear the components you do not want to install.

AppServ Package Components

☑ Apache HTTP Server
☑ MySQL Database
☑ PHP Hypertext Preprocessor
☑ phpMyAdmin

Then, select the AppServ Package Components to install, and click on **Next** button for the next step.


AppServ 2.5.10 Setup
Nullsoft Install System v2.18
< Back
Next >
Cancel

Apache HTTP Server Information

Please enter your server's information.

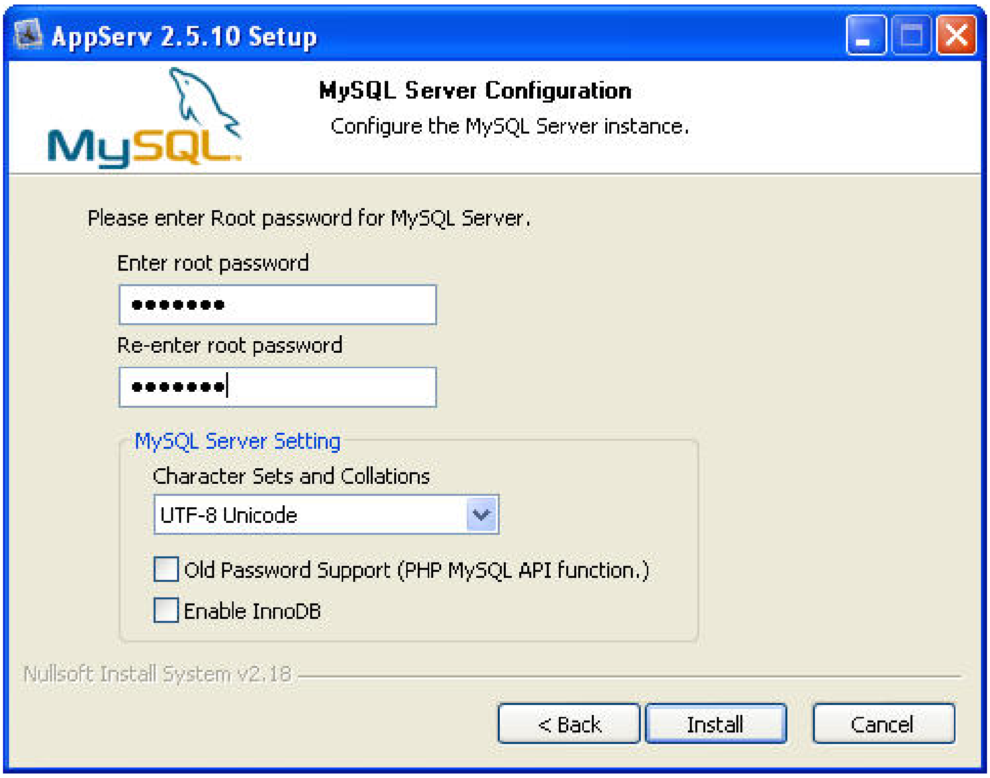
Server Name (e.g. www.appservnetwork.com)

Administrator's Email Address (e.g. webmaster@gmail.com)

Apache HTTP Port (Default : 80)

80

Specify Server Name, Administrator’s Email Address and Apache HTTP port for Apache Web Server. When perform testing, the Servo Name can be specified as **localhost** directly. Click on **Next** button for MySQL Server Configuration settings



AppServ 2.5.10 Setup

MySQL Server Configuration

Configure the MySQL Server instance.

Please enter Root password for MySQL Server.

Enter root password: ●●●●●●●

Re-enter root password: ●●●●●●●

MySQL Server Setting

Character Sets and Collations: UTF-8 Unicode

☐ Old Password Support (PHP MySQL API function.)

☐ Enable InnoDB

MySQL
Nullsoft Install System v2.18
< Back
Install
Cancel

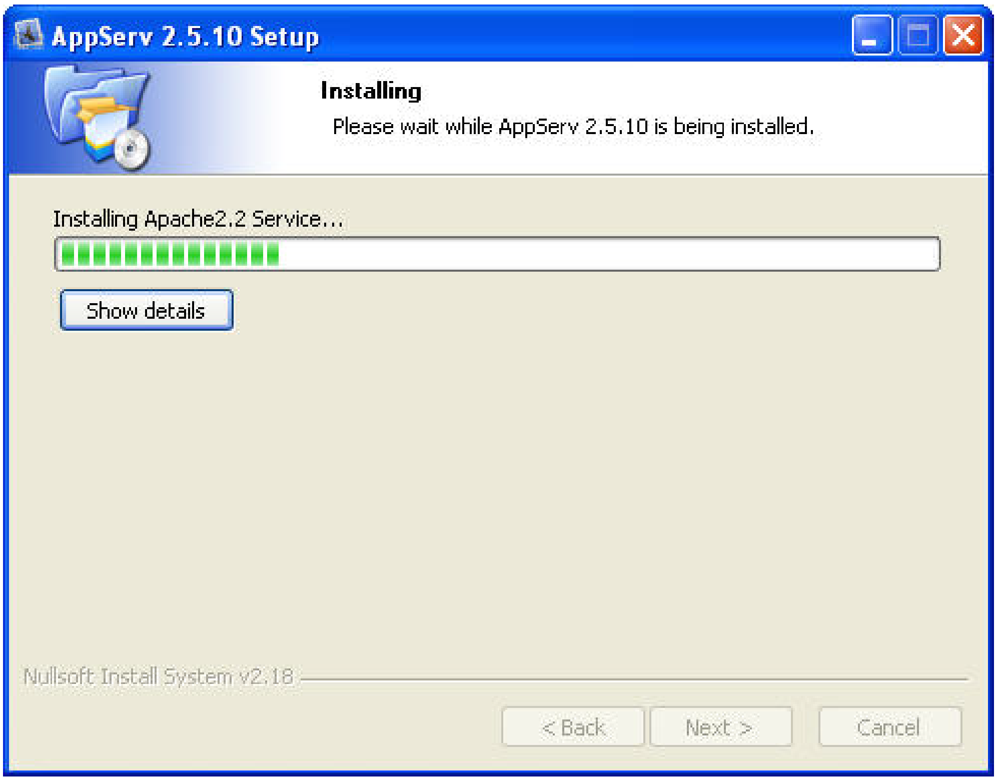
Enter root password for MySQL database and complete the settings for MySQL Server.

Character Sets and Collations: The users can select data storage language and collations from the drop-down menu.

Old Password Support (PHP MySQL API function): When this option is selected, the users can code PHP code with old MySQL API.

Enable InnoDB: When InnoDB is used, ensure to select this option.

Click on **Install** button to installing Apache.



AppServ 2.5.10 Setup

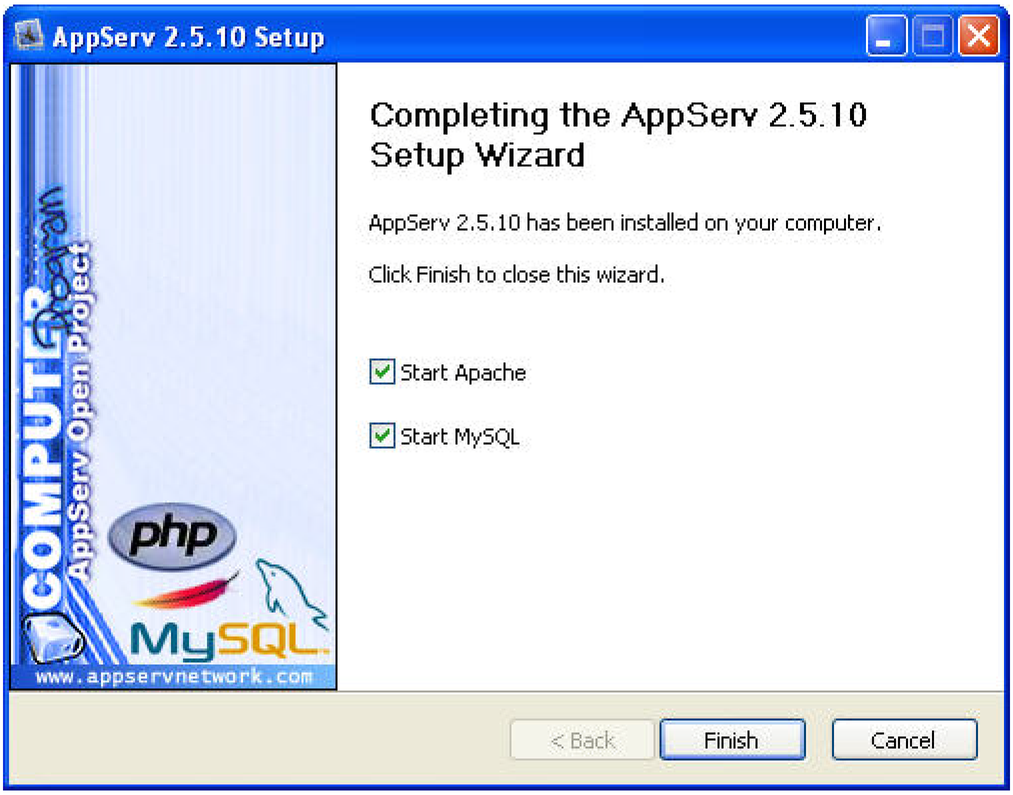
Installing

Please wait while AppServ 2.5.10 is being installed.

Installing Apache2.2 Service...

Show details
Nullsoft Install System v2.18
< Back
Next >
Cancel

Click on **Finish** button to complete AppServ setup.


AppServ 2.5.10 Setup
COMPUTER Program
AppServ Open Project
php
MySQL
www.appservnetwork.com
< Back
Finish
Cancel

Completing the AppServ 2.5.10 Setup Wizard

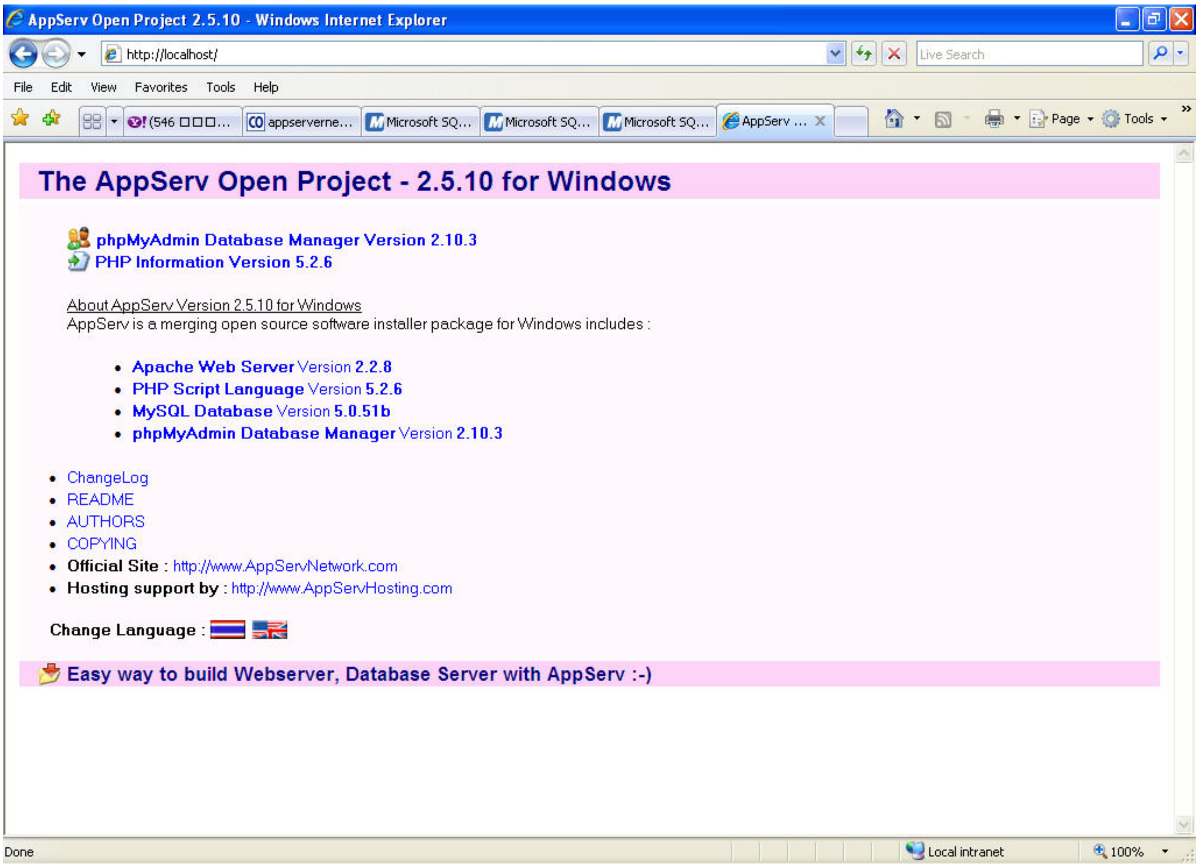
AppServ 2.5.10 has been installed on your computer.

Click Finish to close this wizard.

☑ Start Apache

☑ Start MySQL

After installing AppServ, please restart the computer. After restart computer, users can view the web site by pointing a web browser to http://localhost/. If the following screen displays, it indicates that Apache has been installed successfully.


AppServ Open Project 2.5.10 - Windows Internet Explorer
http://localhost/
Live Search
File
Edit
View
Favorites
Tools
Help
appserverne...
Microsoft SQ...
Microsoft SQ...
Microsoft SQ...
AppServ ...
Page
Tools
Done
Local intranet
100%

The AppServ Open Project - 2.5.10 for Windows

phpMyAdmin Database Manager Version 2.10.3
PHP Information Version 5.2.6

About AppServ Version 2.5.10 for Windows
AppServ is a merging open source software installer package for Windows includes :

- **Apache Web Server** Version **2.2.8**
- **PHP Script Language** Version **5.2.6**
- **MySQL Database** Version **5.0.51b**
- **phpMyAdmin Database Manager** Version **2.10.3**

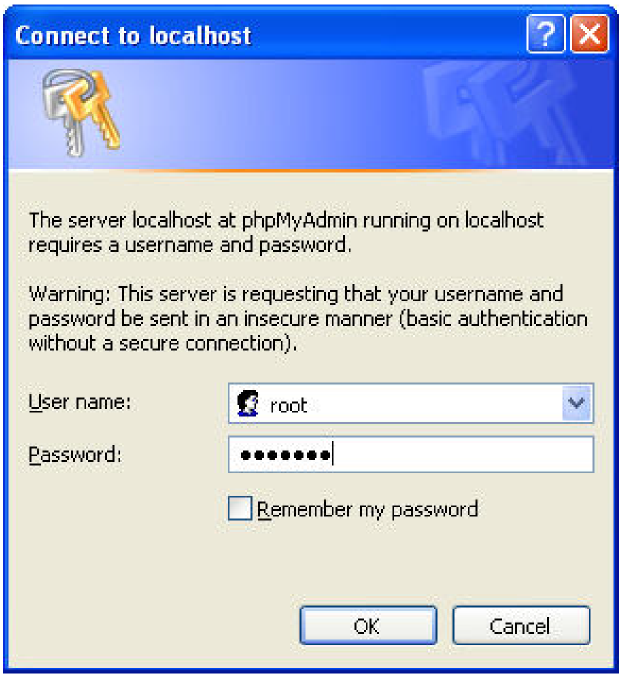
- ChangeLog
- README
- AUTHORS
- COPYING
- **Official Site :** http://www.AppServNetwork.com
- **Hosting support by :** http://www.AppServHosting.com

Change Language :

Easy way to build Webserver, Database Server with AppServ :-)

2. MySQL Settings

Use phpMyAdmin built-in AppServ to perform the relevant MySQL settings. Open the browser, type: http://localhost/phpMyAdmin/, a **Connect to localhost** dialog box will display. Enter **root** for username and your password for password (The default administrator account is root, but depending on your setup it may be a different user name.)



Connect to localhost

The server localhost at phpMyAdmin running on localhost requires a username and password.

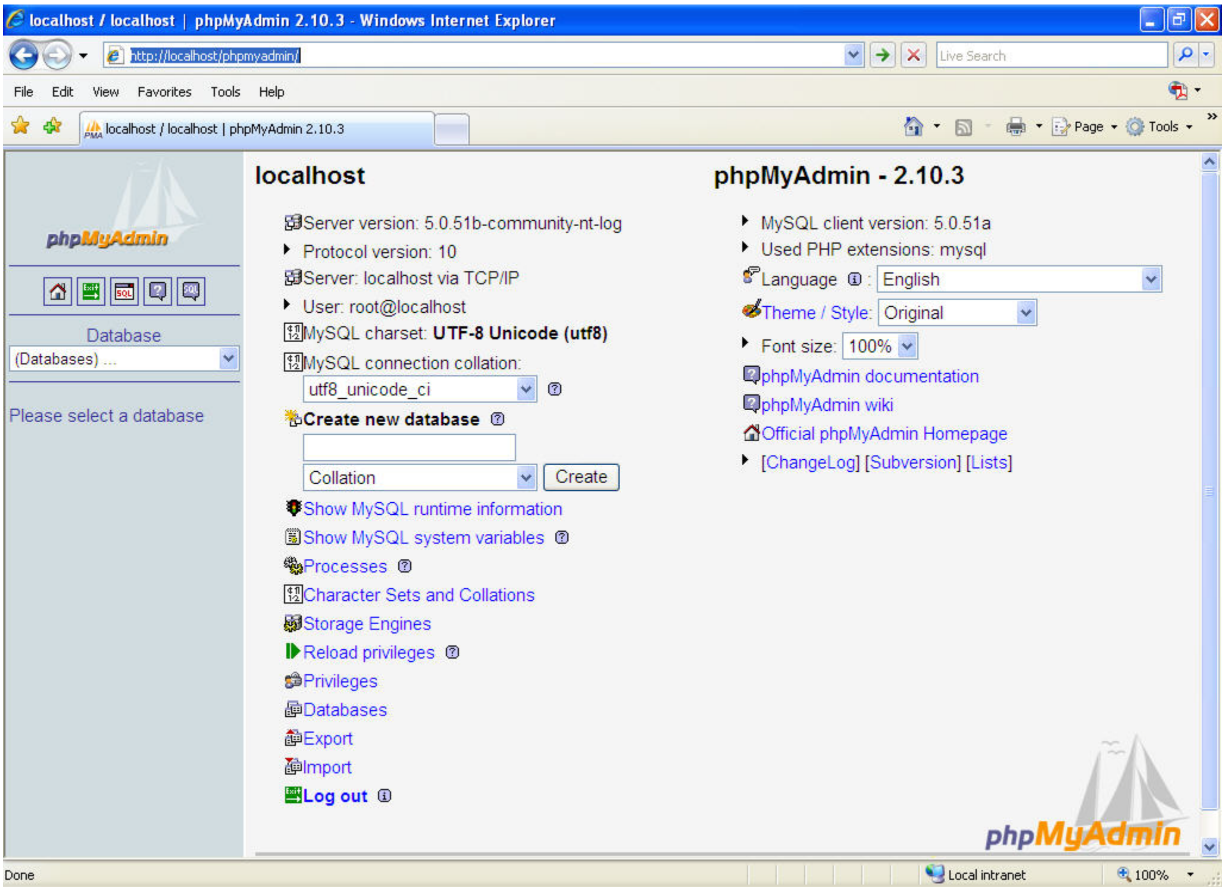
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).

User name: root

Password: •••••••

☐ Remember my password

Then, it will connect to MySQL database.



localhost / localhost | phpMyAdmin 2.10.3 - Windows Internet Explorer

http://localhost/phpmyadmin/

Live Search
File
Edit
View
Favorites
Tools
Help
localhost / localhost | phpMyAdmin 2.10.3
Page
Tools
phpMyAdmin
Database
(Databases) ...
Please select a database

localhost

- Server version: 5.0.51b-community-nt-log
- Protocol version: 10
- Server: localhost via TCP/IP
- User: root@localhost
- MySQL charset: **UTF-8 Unicode (utf8)**
- MySQL connection collation: utf8_unicode_ci
- **Create new database**

Collation
Create
Show MySQL runtime information
Show MySQL system variables
Processes
Character Sets and Collations
Storage Engines
Reload privileges
Privileges
Databases
Export
Import
Log out

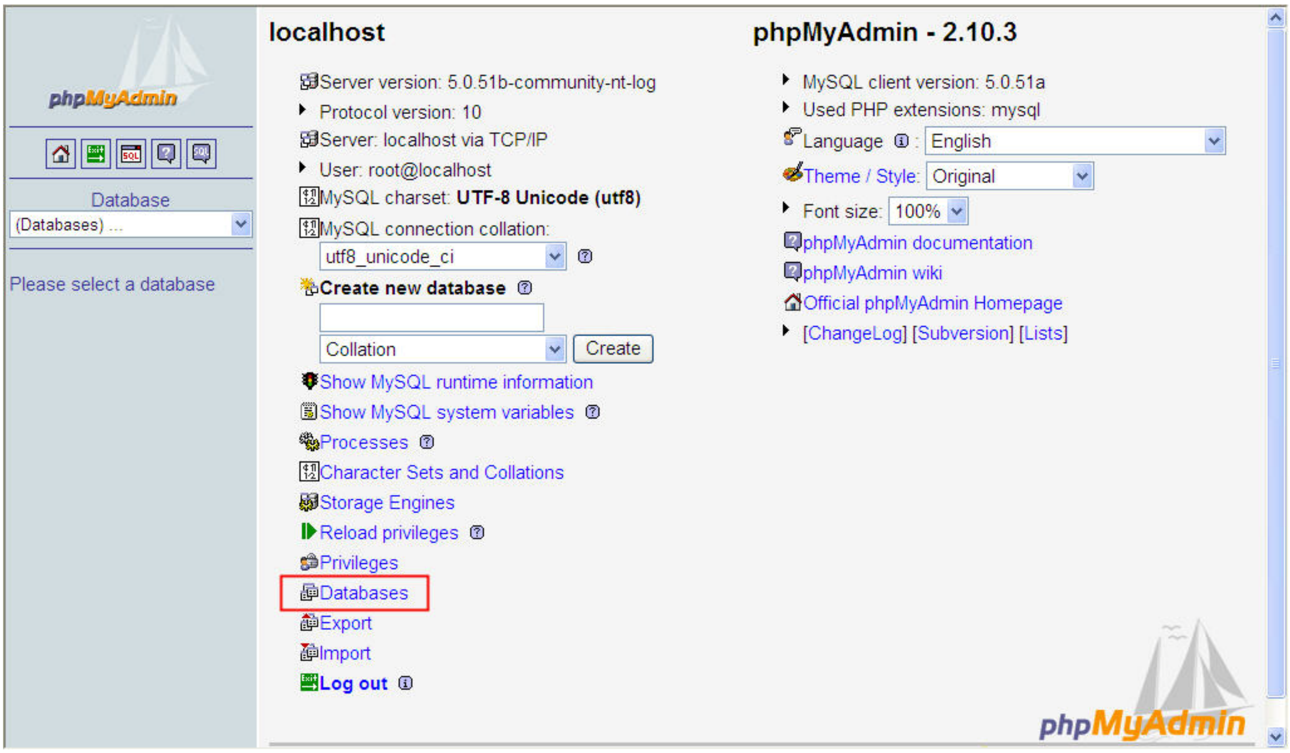
phpMyAdmin - 2.10.3

- MySQL client version: 5.0.51a
- Used PHP extensions: mysql
- Language: English
- Theme / Style: Original
- Font size: 100%

phpMyAdmin documentation
phpMyAdmin wiki
Official phpMyAdmin Homepage
[ChangeLog] [Subversion] [Lists]
phpMyAdmin
Done
Local intranet
100%

A. Create New Database

Click on **Databases** link.



phpMyAdmin
Database
(Databases) ...
Please select a database

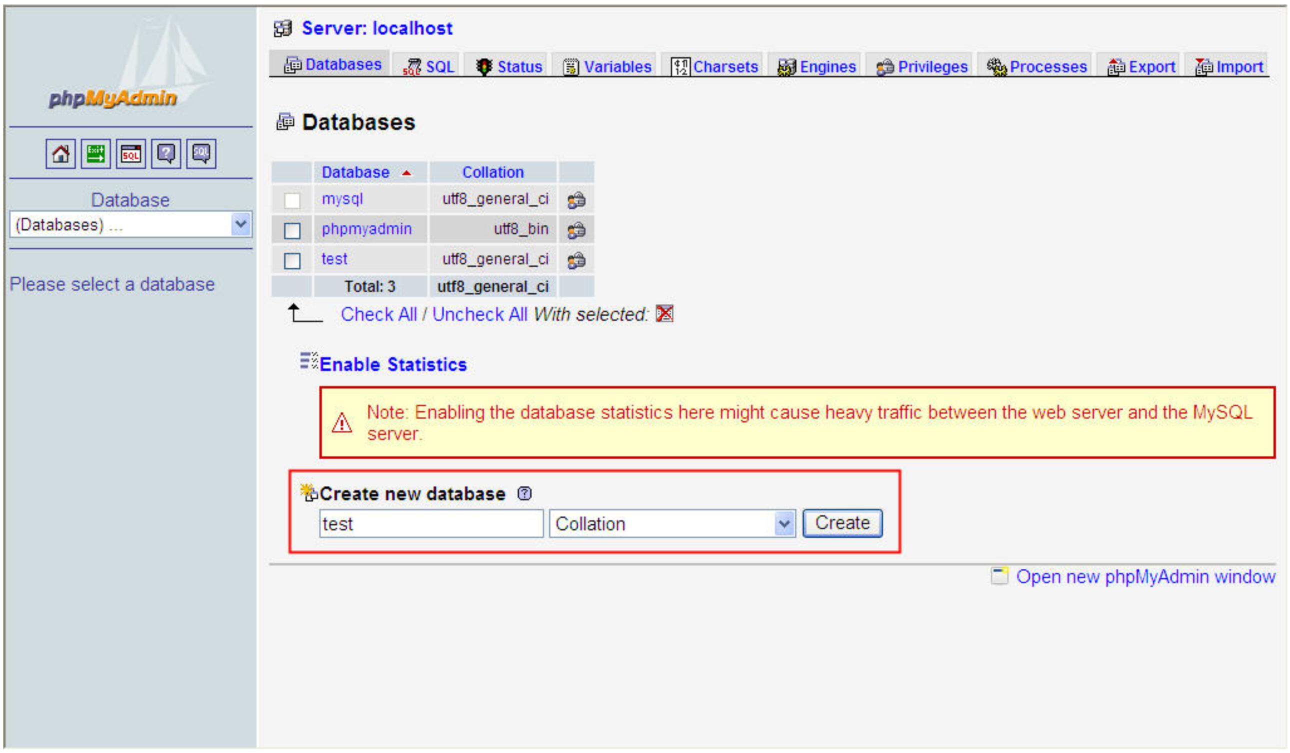
localhost

- Server version: 5.0.51b-community-nt-log
- Protocol version: 10
- Server: localhost via TCP/IP
- User: root@localhost
- MySQL charset: **UTF-8 Unicode (utf8)**
- MySQL connection collation: utf8_unicode_ci
- **Create new database**
  Collation Create
- Show MySQL runtime information
- Show MySQL system variables
- Processes
- Character Sets and Collations
- Storage Engines
- Reload privileges
- Privileges
- Databases
- Export
- Import
- **Log out**

phpMyAdmin - 2.10.3

- MySQL client version: 5.0.51a
- Used PHP extensions: mysql
- Language: English
- Theme / Style: Original
- Font size: 100%
- phpMyAdmin documentation
- phpMyAdmin wiki
- Official phpMyAdmin Homepage
- [ChangeLog] [Subversion] [Lists]

Enter the name of the new database. In this case, the name of the new database is entered as **test**. Click on **Create** button for the next step.



phpMyAdmin
Database
(Databases) ...
Please select a database
Server: localhost
Databases
SQL
Status
Variables
Charsets
Engines
Privileges
Processes
Export
Import

Databases

	Database	Collation	
☐	mysql	utf8_general_ci	
☐	phpmyadmin	utf8_bin	
☐	test	utf8_general_ci	
	Total: 3	utf8_general_ci	

Check All / Uncheck All *With selected:*

Enable Statistics

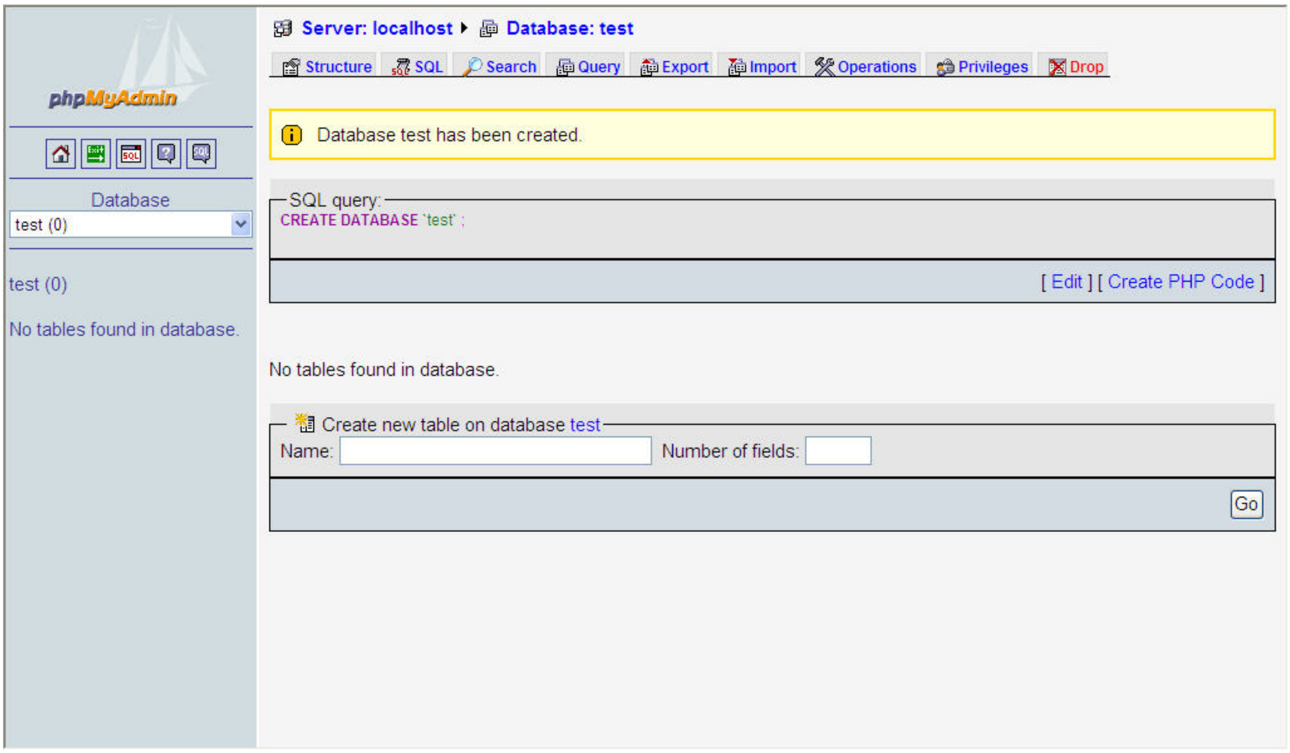
Note: Enabling the database statistics here might cause heavy traffic between the web server and the MySQL server.

Create new database

test Collation Create

Open new phpMyAdmin window

A new database has been created.


phpMyAdmin
Server: localhost
Database: test
Structure
SQL
Search
Query
Export
Import
Operations
Privileges
Drop
Database
test (0)
[Edit] [Create PHP Code]
Go

Database test has been created.

SQL query:

```
CREATE DATABASE `test` ;
```

test (0)

No tables found in database.

No tables found in database.

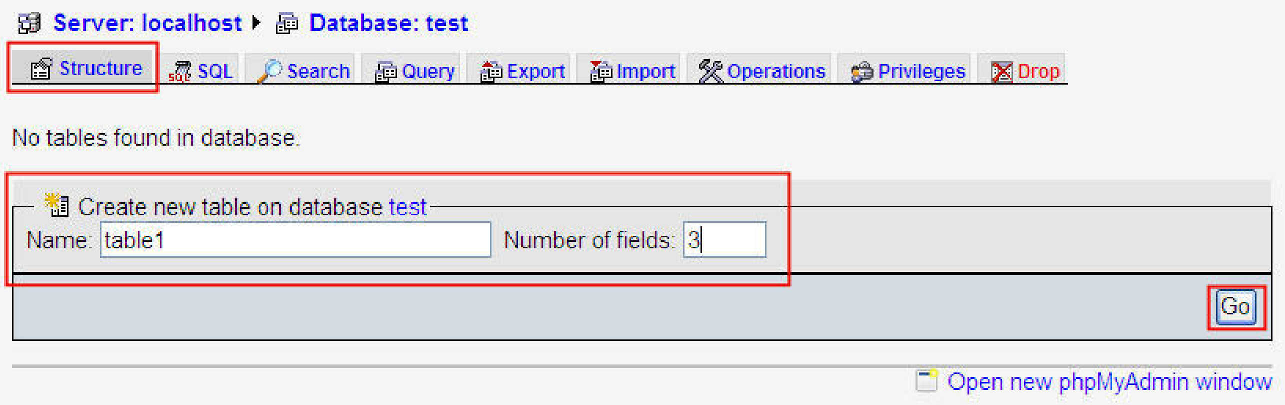
Create new table on database test

Name:

Number of fields:

B. Create New Table

Click on **Structure** link to create new table on database. In this case, the new table is named as table1 and the number of fields is set to 3. After **Go** button is pressed, a new table on database will be created.


Server: localhost
Database: test
Structure
SQL
Search
Query
Export
Import
Operations
Privileges
Drop
Go
Open new phpMyAdmin window

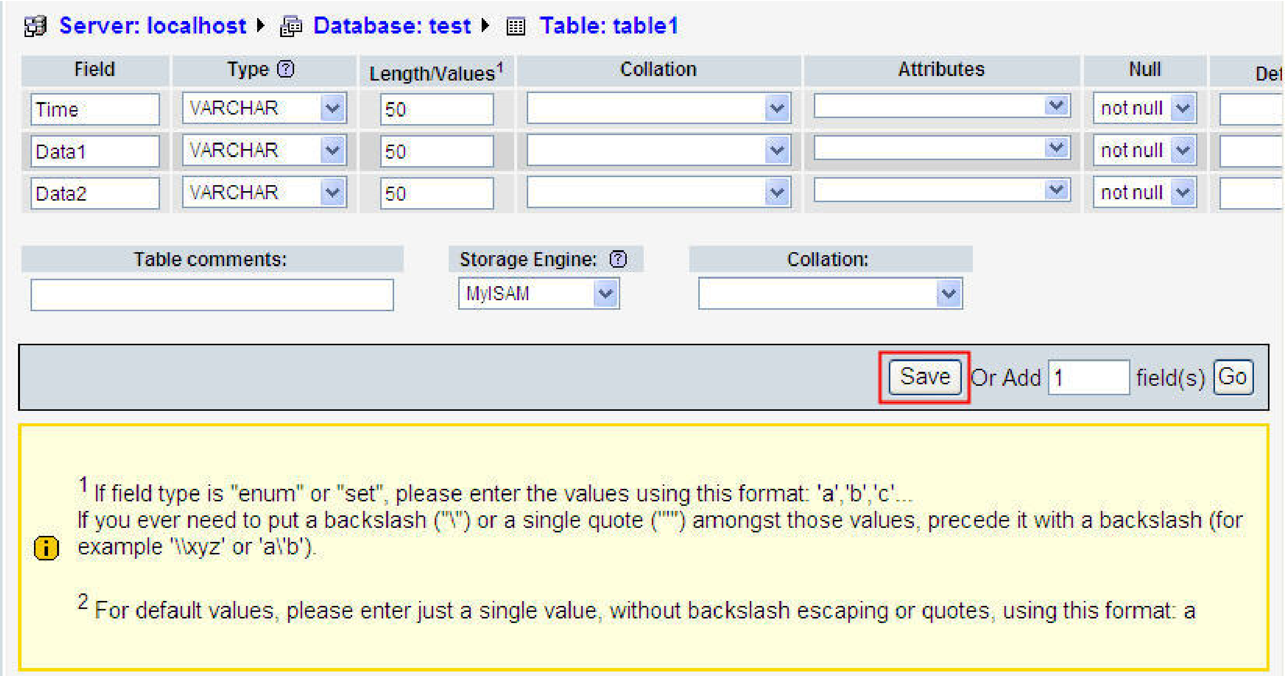
No tables found in database.

Create new table on database test

Name: table1

Number of fields: 3

Complete the settings by referring to the figure below and press **Save** button to save changes.



Server: localhost ▸ Database: test ▸ Table: table1

Field	Type	Length/Values[1]	Collation	Attributes	Null	Def
Time	VARCHAR	50			not null	
Data1	VARCHAR	50			not null	
Data2	VARCHAR	50			not null	

Table comments:

Storage Engine: MyISAM

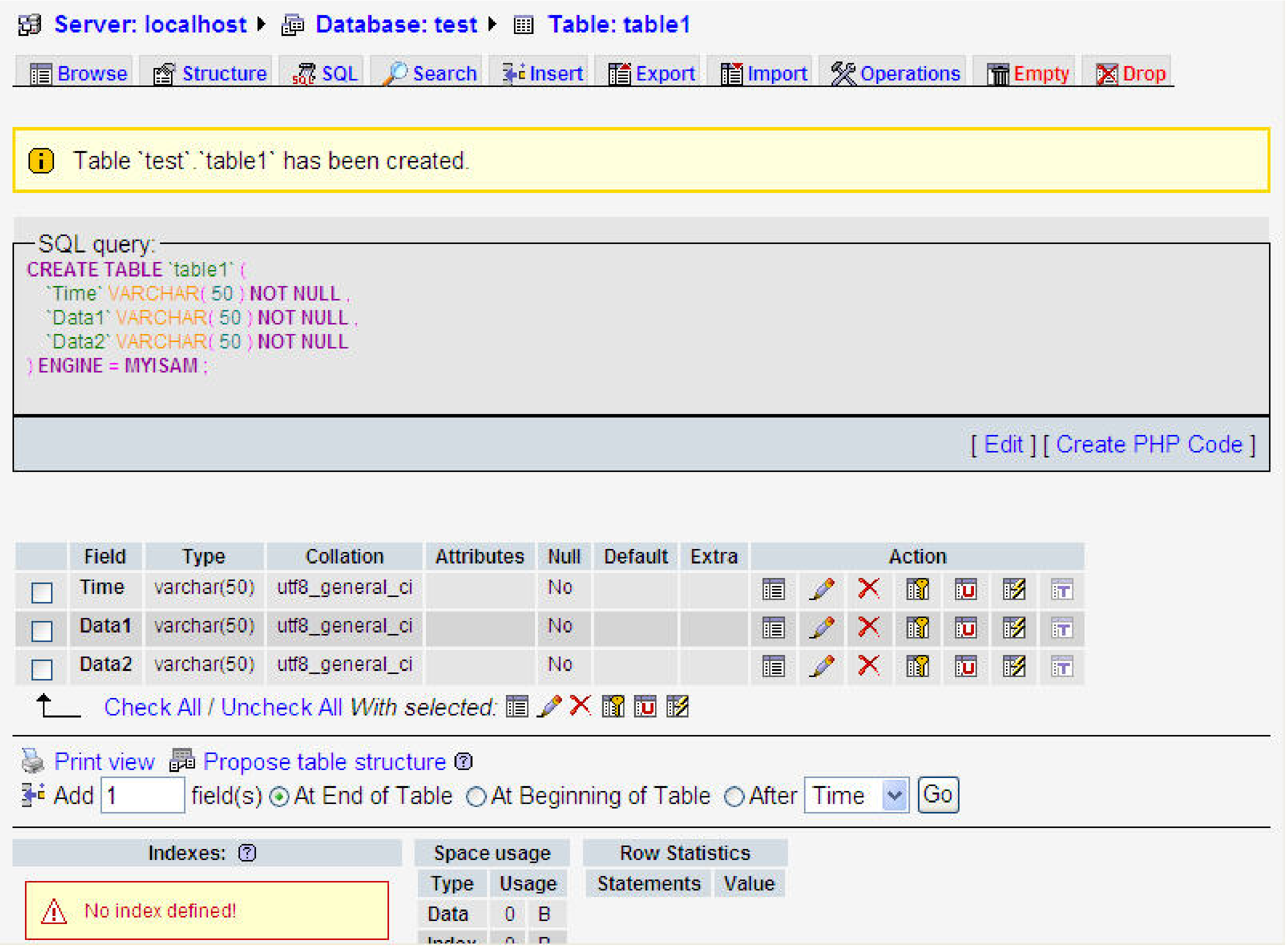
Collation:

Save
Or Add 1 field(s) Go

[1] If field type is "enum" or "set", please enter the values using this format: 'a','b','c'...
If you ever need to put a backslash ("\") or a single quote ("'") amongst those values, precede it with a backslash (for example '\\xyz' or 'a\'b').

[2] For default values, please enter just a single value, without backslash escaping or quotes, using this format: a

After the table1 has been created, the screen will be shown as follows.



Server: localhost ▸ Database: test ▸ Table: table1

Browse
Structure
SQL
Search
Insert
Export
Import
Operations
Empty
Drop

Table `test`.`table1` has been created.

SQL query:

```
CREATE TABLE `table1` (
  `Time` VARCHAR( 50 ) NOT NULL ,
  `Data1` VARCHAR( 50 ) NOT NULL ,
  `Data2` VARCHAR( 50 ) NOT NULL
) ENGINE = MYISAM ;
```

[Edit] [Create PHP Code]

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
☐	Time	varchar(50)	utf8_general_ci		No			
☐	Data1	varchar(50)	utf8_general_ci		No			
☐	Data2	varchar(50)	utf8_general_ci		No			

Check All / Uncheck All *With selected:*
Print view
Propose table structure
Add 1 field(s) ● At End of Table ○ At Beginning of Table ○ After Time Go
Indexes:

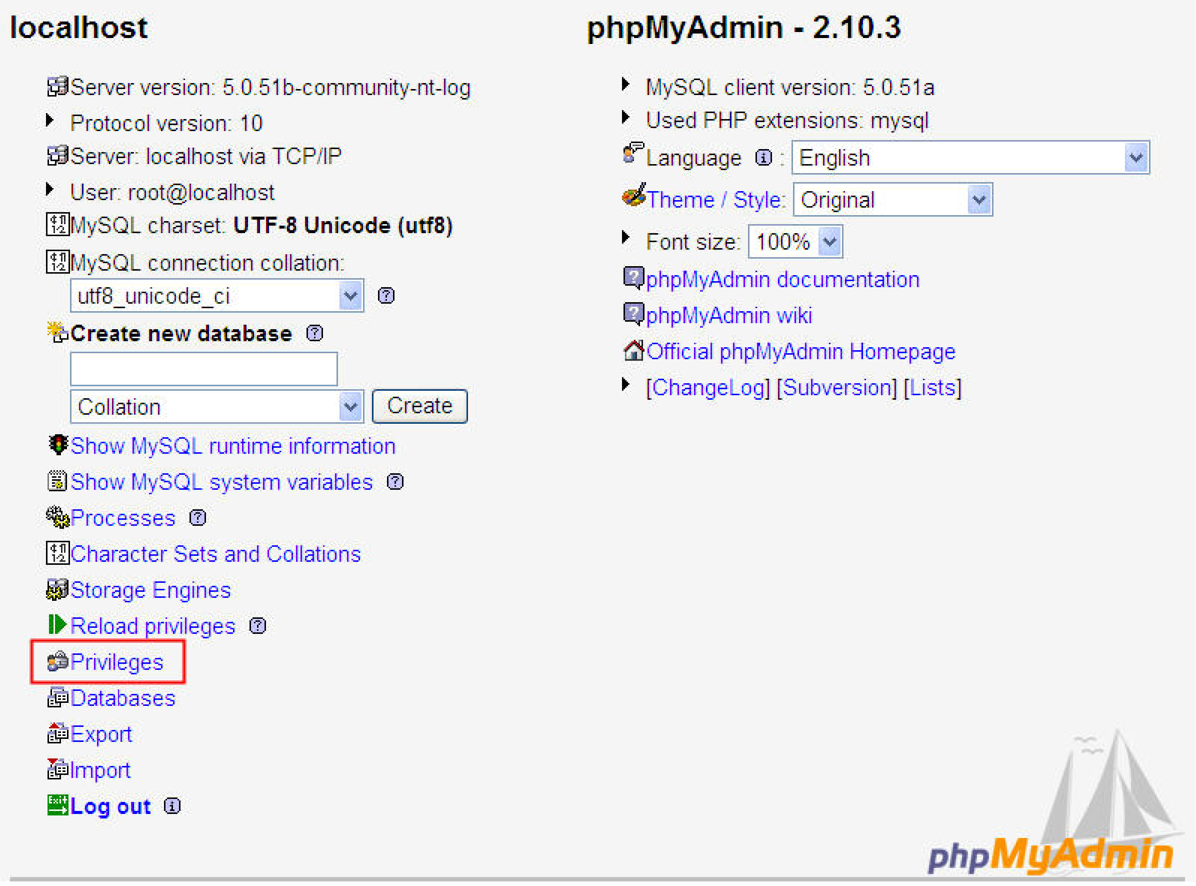
No index defined!

Space usage	
Type	Usage
Data	0 B
Index	0 B

Row Statistics
Statements Value

C. Create New User

Click on **Privileges** link to open User overview page.



localhost

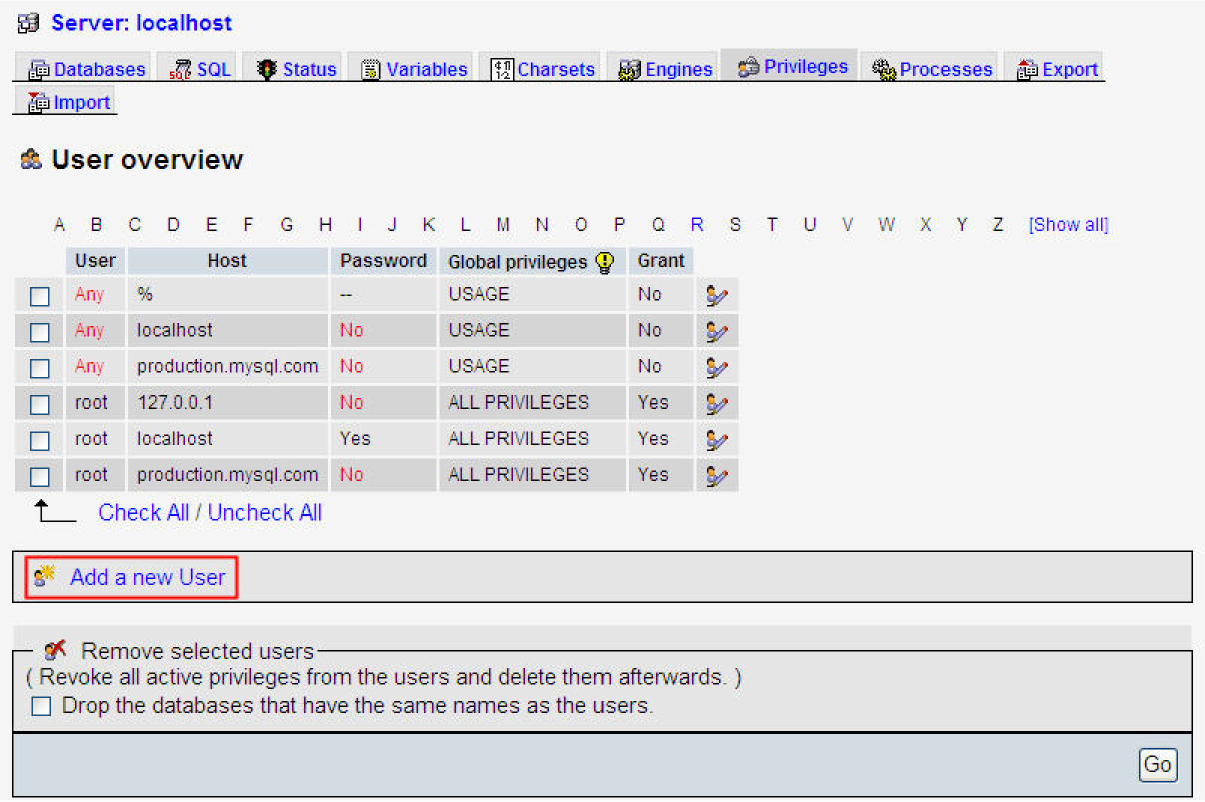
Server version: 5.0.51b-community-nt-log
Protocol version: 10
Server: localhost via TCP/IP
User: root@localhost
MySQL charset: **UTF-8 Unicode (utf8)**
MySQL connection collation: utf8_unicode_ci

phpMyAdmin - 2.10.3

MySQL client version: 5.0.51a
Used PHP extensions: mysql
Language: English
Theme / Style: Original
Font size: 100%

Create new database
Collation
Create
Show MySQL runtime information
Show MySQL system variables
Processes
Character Sets and Collations
Storage Engines
Reload privileges
Privileges
Databases
Export
Import
Log out
phpMyAdmin documentation
phpMyAdmin wiki
Official phpMyAdmin Homepage
[ChangeLog] [Subversion] [Lists]
phpMyAdmin

Click on **Add a new User** link to display the add new user page



Server: localhost

Databases
SQL
Status
Variables
Charsets
Engines
Privileges
Processes
Export
Import

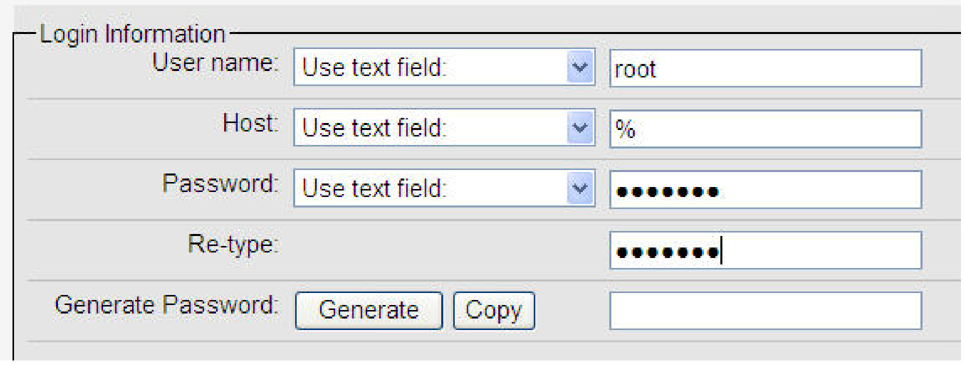
User overview

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [Show all]

	User	Host	Password	Global privileges	Grant	
☐	Any	%	--	USAGE	No	
☐	Any	localhost	No	USAGE	No	
☐	Any	production.mysql.com	No	USAGE	No	
☐	root	127.0.0.1	No	ALL PRIVILEGES	Yes	
☐	root	localhost	Yes	ALL PRIVILEGES	Yes	
☐	root	production.mysql.com	No	ALL PRIVILEGES	Yes	

Check All / Uncheck All
Add a new User

Remove selected users
(Revoke all active privileges from the users and delete them afterwards.)
☐ Drop the databases that have the same names as the users.



Login Information

User name: Use text field: root

Host: Use text field: %

Password: Use text field: •••••••

Re-type: •••••••

Generate Password:

Login Information:

User name: Enter user name **root**

Host: Select **Any host** from the drop down menu and insert a **%** code.

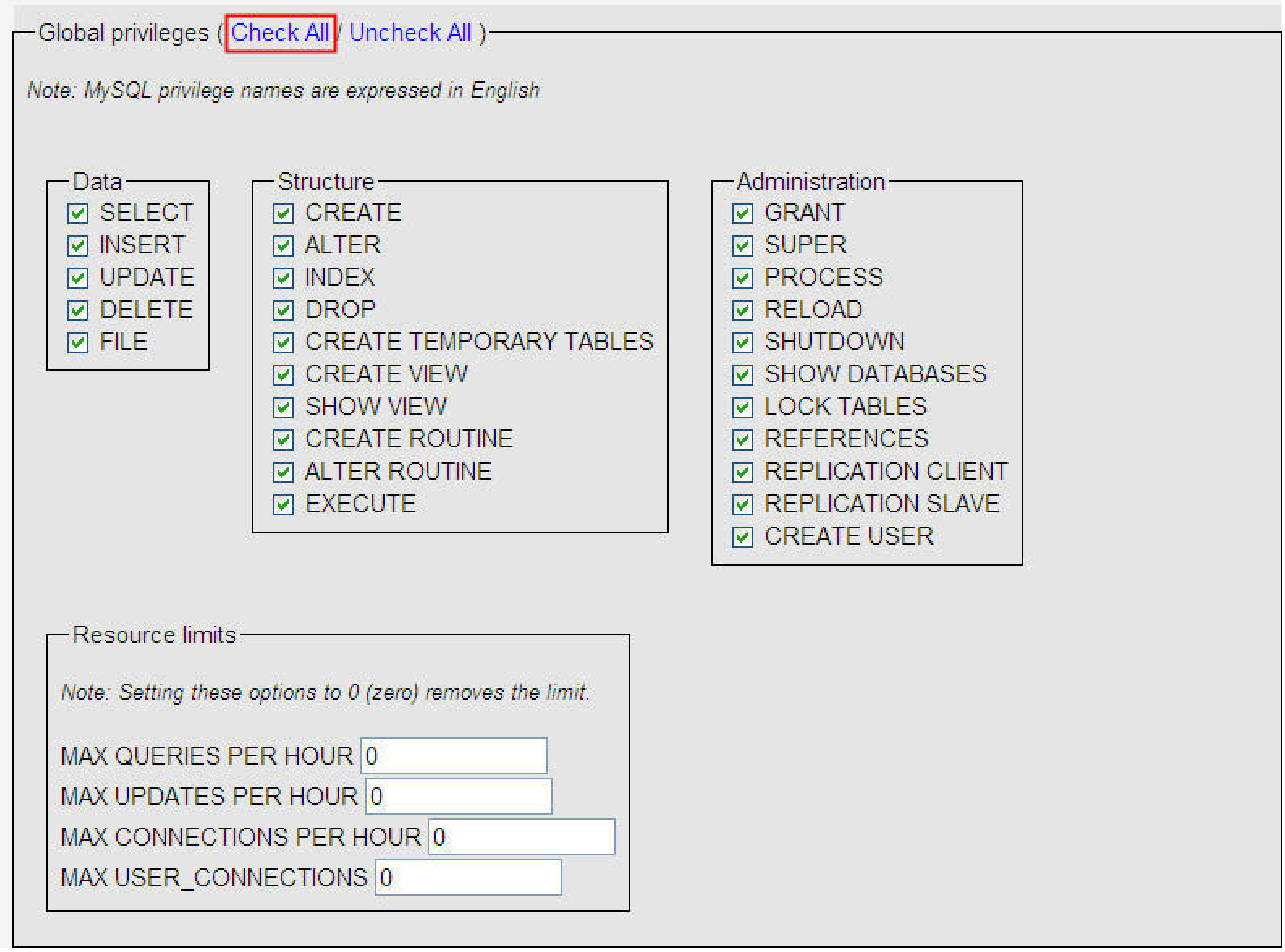
Password: Enter the desired password

Re-type: Re-enter the desired password

General Password:

- Click on **Generate** button to automatically generate a password.
- Click on **Copy** button to insert the password into the fields of Password and Re-type.

Scroll the screen down and click on **Check All** link to select all privileges. Then, click on **GO** button to create a new user.



Global privileges (Check All / Uncheck All)

Note: MySQL privilege names are expressed in English

Data
☑ SELECT
☑ INSERT
☑ UPDATE
☑ DELETE
☑ FILE

Structure
☑ CREATE
☑ ALTER
☑ INDEX
☑ DROP
☑ CREATE TEMPORARY TABLES
☑ CREATE VIEW
☑ SHOW VIEW
☑ CREATE ROUTINE
☑ ALTER ROUTINE
☑ EXECUTE

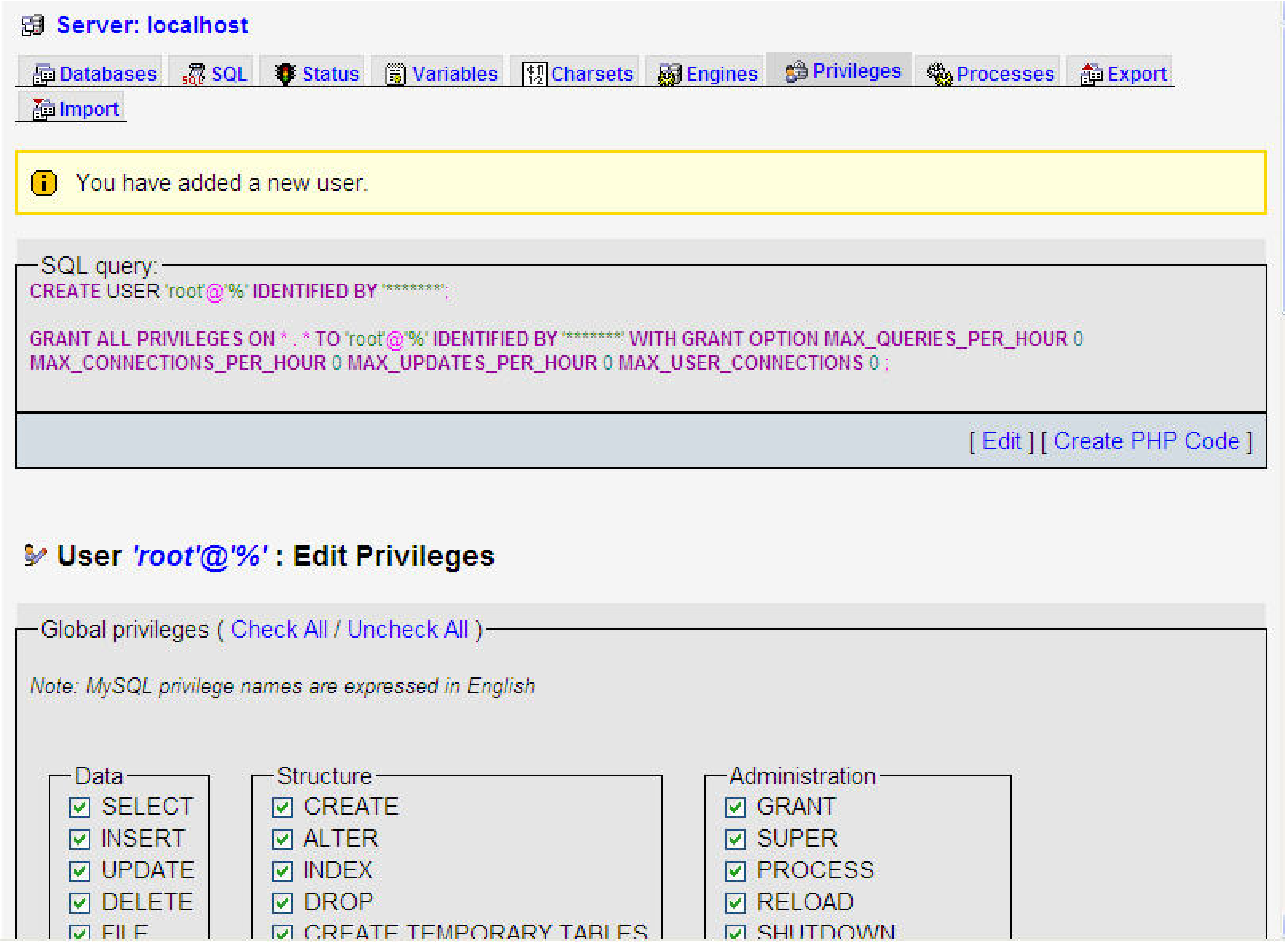
Administration
☑ GRANT
☑ SUPER
☑ PROCESS
☑ RELOAD
☑ SHUTDOWN
☑ SHOW DATABASES
☑ LOCK TABLES
☑ REFERENCES
☑ REPLICATION CLIENT
☑ REPLICATION SLAVE
☑ CREATE USER

Resource limits

Note: Setting these options to 0 (zero) removes the limit.

MAX QUERIES PER HOUR 0
MAX UPDATES PER HOUR 0
MAX CONNECTIONS PER HOUR 0
MAX USER_CONNECTIONS 0

A conformation message will be displayed as follows.


Server: localhost
Databases
SQL
Status
Variables
Charsets
Engines
Privileges
Processes
Export
Import

You have added a new user.

SQL query:

```
CREATE USER 'root'@'%' IDENTIFIED BY '********';

GRANT ALL PRIVILEGES ON * . * TO 'root'@'%' IDENTIFIED BY '********' WITH GRANT OPTION MAX_QUERIES_PER_HOUR 0
MAX_CONNECTIONS_PER_HOUR 0 MAX_UPDATES_PER_HOUR 0 MAX_USER_CONNECTIONS 0 ;
```

[Edit] [Create PHP Code]

User 'root'@'%' : Edit Privileges

Global privileges (Check All / Uncheck All)

Note: MySQL privilege names are expressed in English

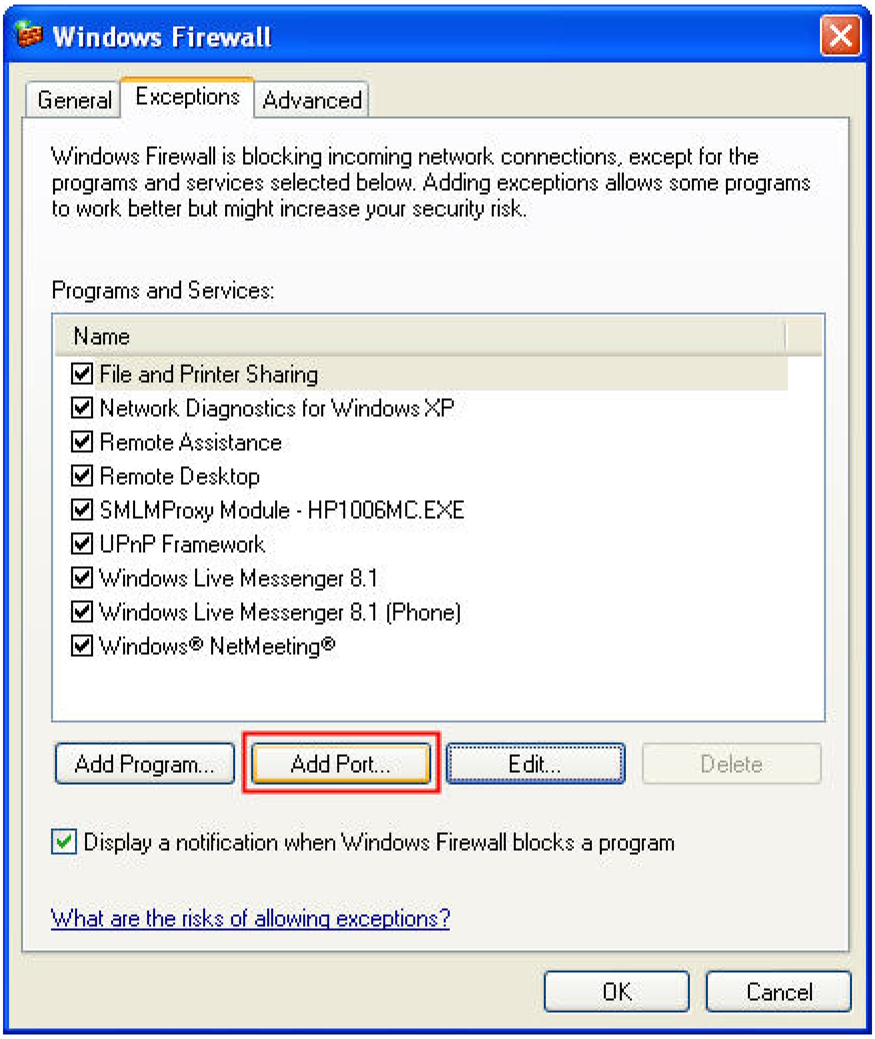
Data
☑ SELECT
☑ INSERT
☑ UPDATE
☑ DELETE
☑ FILE

Structure
☑ CREATE
☑ ALTER
☑ INDEX
☑ DROP
☑ CREATE TEMPORARY TABLES

Administration
☑ GRANT
☑ SUPER
☑ PROCESS
☑ RELOAD
☑ SHUTDOWN

3. Setting Windows Firewall

Click **Start** and then click **Control Panel**. In the **Control Panel**, click **Windows Security Center > Windows Firewall**. Then, click on the **Exceptions** tab.


Windows Firewall
General
Exceptions
Advanced
Add Program...
Add Port...
Edit...
Delete
OK
Cancel

Windows Firewall is blocking incoming network connections, except for the programs and services selected below. Adding exceptions allows some programs to work better but might increase your security risk.

Programs and Services:

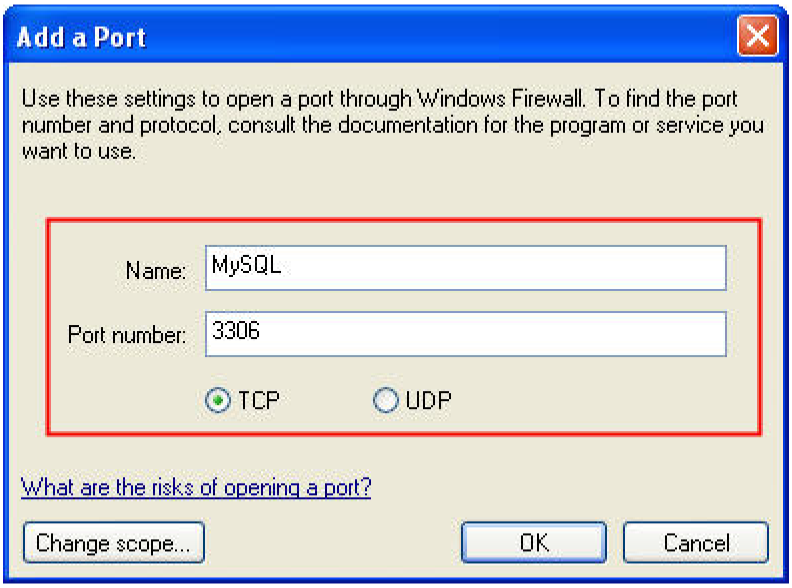
Name

☑ File and Printer Sharing
☑ Network Diagnostics for Windows XP
☑ Remote Assistance
☑ Remote Desktop
☑ SMLMProxy Module - HP1006MC.EXE
☑ UPnP Framework
☑ Windows Live Messenger 8.1
☑ Windows Live Messenger 8.1 (Phone)
☑ Windows® NetMeeting®

☑ Display a notification when Windows Firewall blocks a program

What are the risks of allowing exceptions?

Click **Add Port** button and the following **Add a Port** dialog box will appear.


Add a Port
Change scope...
OK
Cancel

Use these settings to open a port through Windows Firewall. To find the port number and protocol, consult the documentation for the program or service you want to use.

Name: MySQL

Port number: 3306

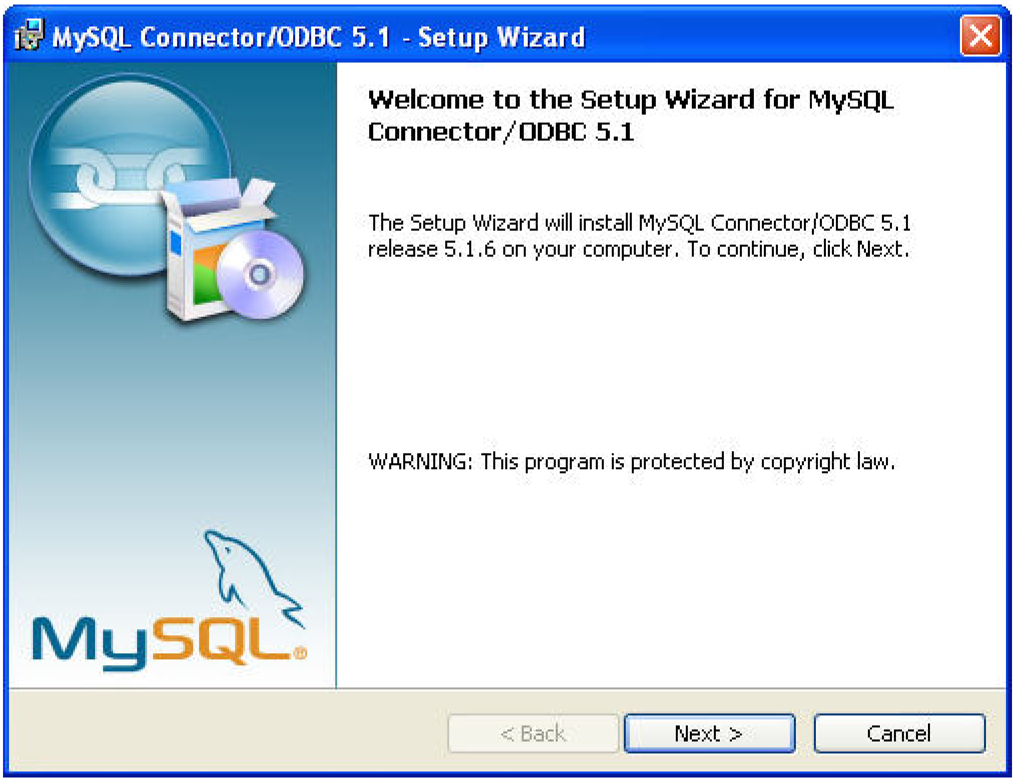
● TCP ○ UDP

What are the risks of opening a port?

In the Add a Port dialog box, type MySQL in the Name text field and type the port number of the instance of the Database Engine, such as 3306 for the default instance in the Port number text field. Ensure that TCP is selected and click OK to complete the settings.

4. Connector/ODBC Installation

Connector/ODBC is a standardized database driver which can be downloaded from MySQL website at http://dev.mysql.com/downloads/connector/odbc/5.1.html.


MySQL Connector/ODBC 5.1 - Setup Wizard
MySQL
< Back
Next >
Cancel

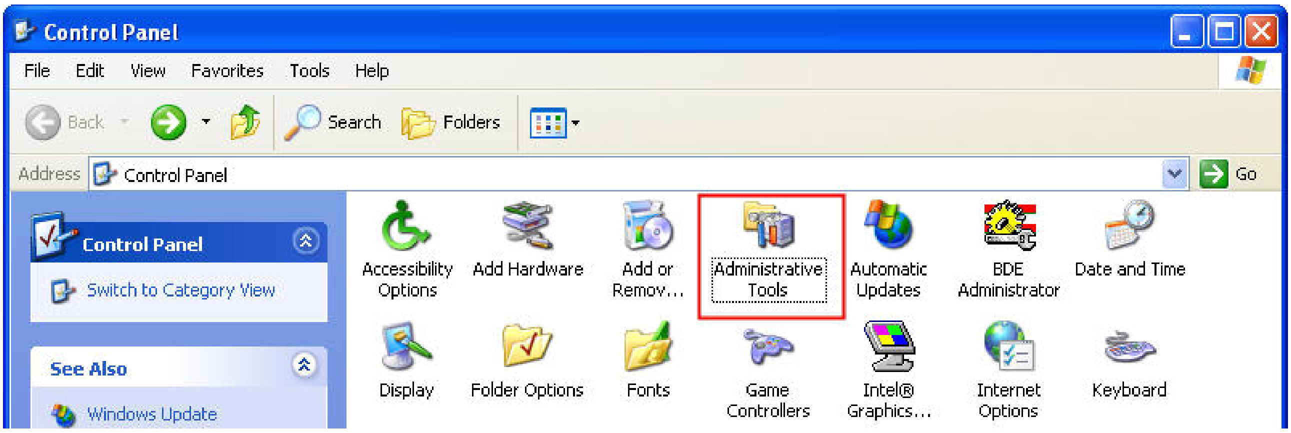
Welcome to the Setup Wizard for MySQL Connector/ODBC 5.1

The Setup Wizard will install MySQL Connector/ODBC 5.1 release 5.1.6 on your computer. To continue, click Next.

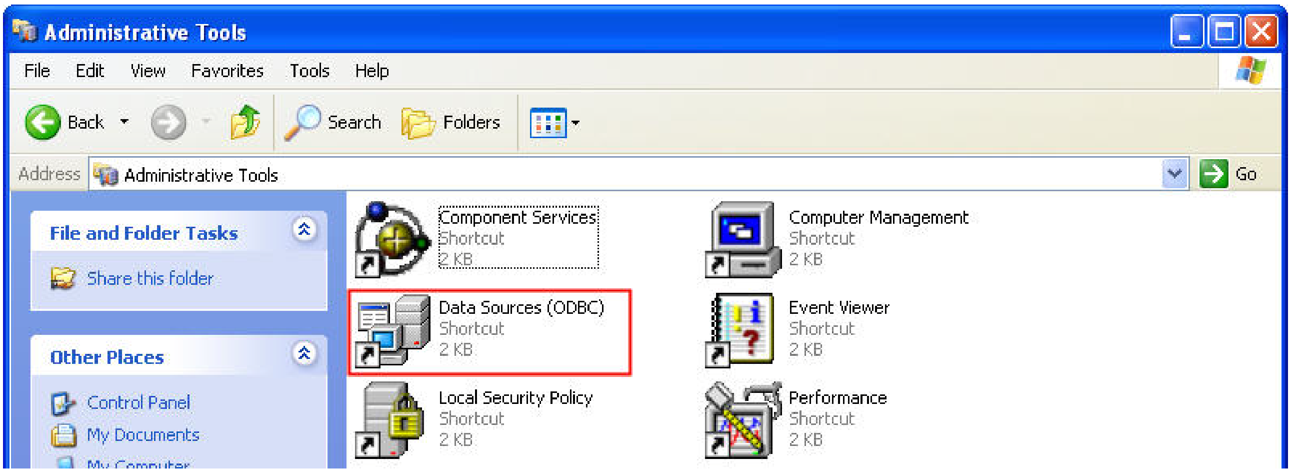
WARNING: This program is protected by copyright law.

5. ODBC Setup

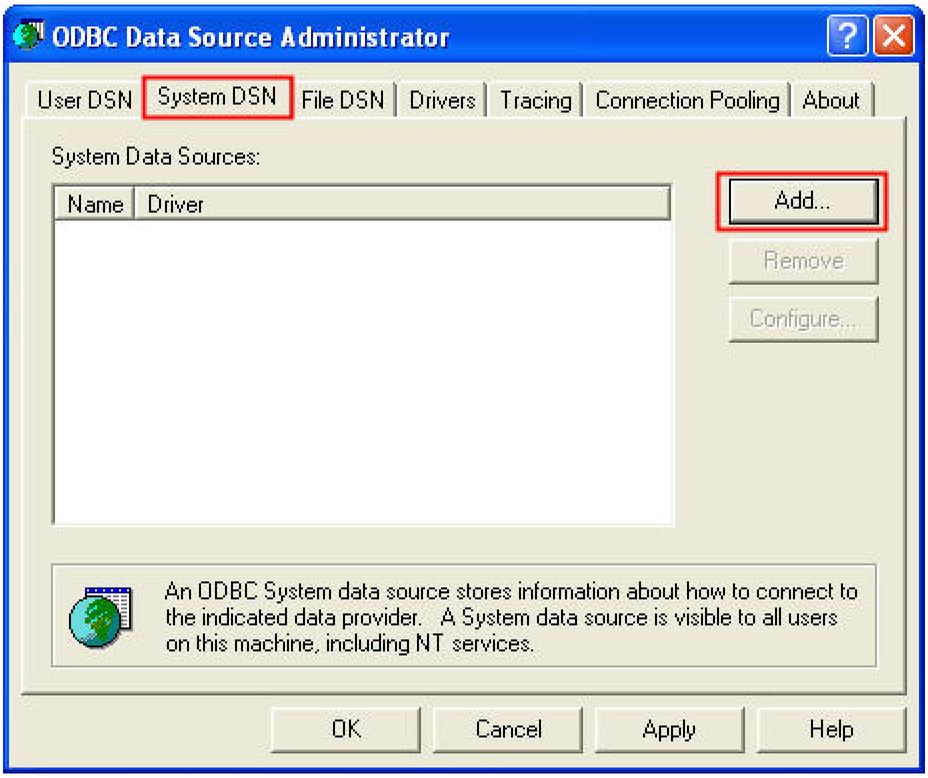
In the **Control Panel**, double-click **Administrative Tools**.


Control Panel
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
Address
Control Panel
Go
Control Panel
Switch to Category View
See Also
Windows Update
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Automatic Updates
BDE Administrator
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel® Graphics...
Internet Options
Keyboard

In the **Administrative Tools**, double-click **Data Sources (ODBC)**.

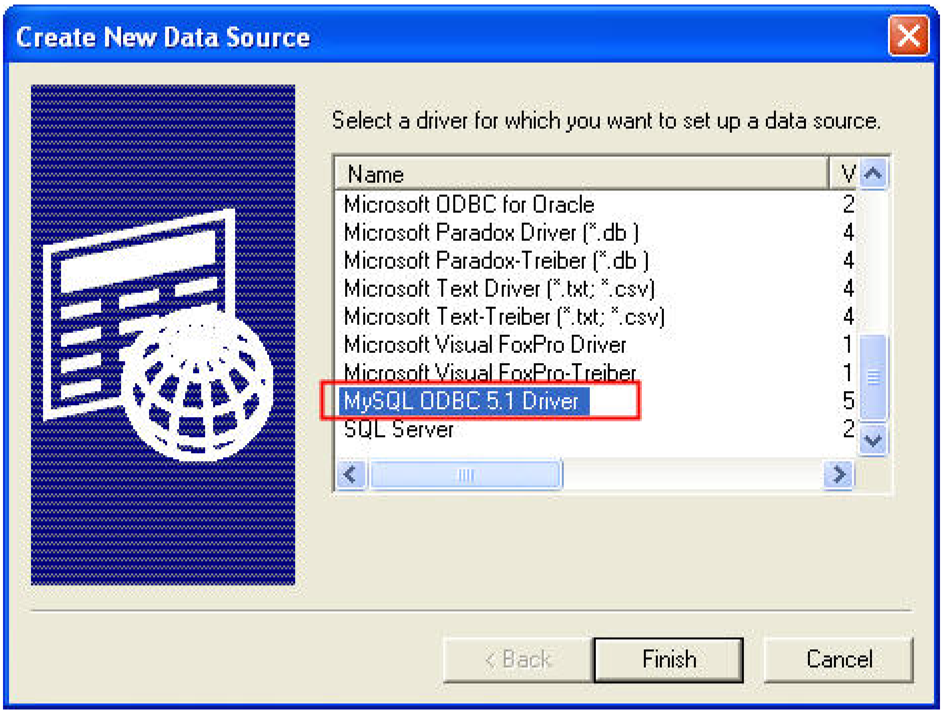

Administrative Tools
File Edit View Favorites Tools Help
Back
Search
Folders
Address Administrative Tools
Go
File and Folder Tasks
Share this folder
Other Places
Control Panel
My Documents
My Computer
Component Services
Shortcut
2 KB
Computer Management
Shortcut
2 KB
Data Sources (ODBC)
Shortcut
2 KB
Event Viewer
Shortcut
2 KB
Local Security Policy
Shortcut
2 KB
Performance
Shortcut
2 KB

In the **ODBC Data Source Administrator** dialog box, select **System DSN** tab and click on **Add** button to add system data source.


ODBC Data Source Administrator
User DSN
System DSN
File DSN
Drivers
Tracing
Connection Pooling
About
System Data Sources:
Name
Driver
Add...
Remove
Configure...
OK
Cancel
Apply
Help

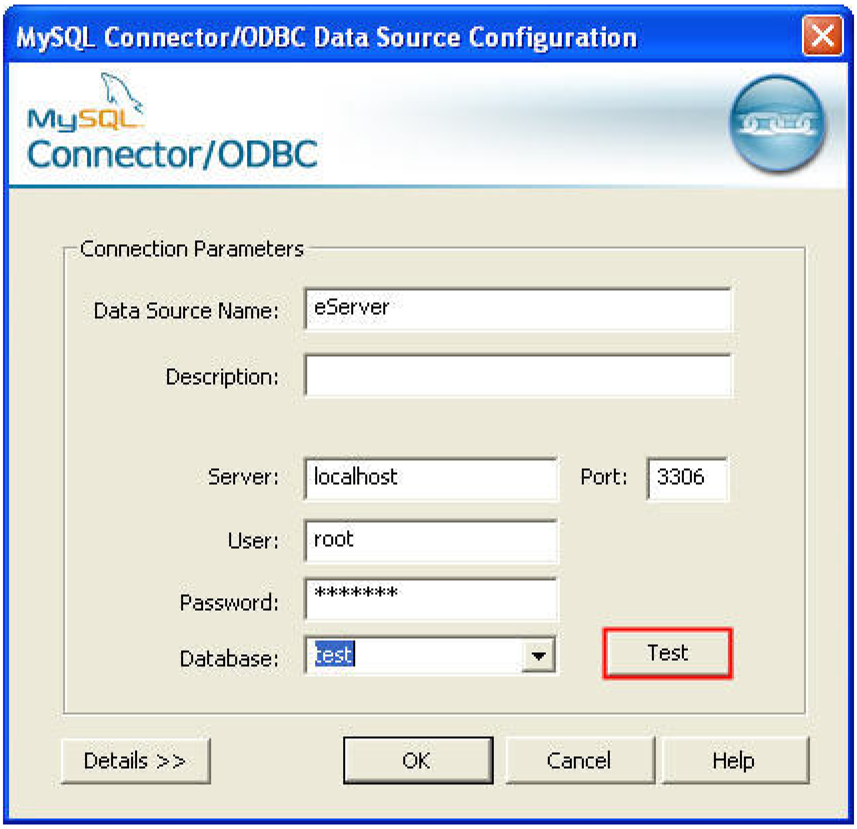
An ODBC System data source stores information about how to connect to the indicated data provider. A System data source is visible to all users on this machine, including NT services.

Select **MySQL ODBC 5.1 Driver** and then click on **Finish** button.


Create New Data Source
Select a driver for which you want to set up a data source.
< Back
Finish
Cancel

Name	V
Microsoft ODBC for Oracle	2
Microsoft Paradox Driver (*.db)	4
Microsoft Paradox-Treiber (*.db)	4
Microsoft Text Driver (*.txt; *.csv)	4
Microsoft Text-Treiber (*.txt; *.csv)	4
Microsoft Visual FoxPro Driver	1
Microsoft Visual FoxPro-Treiber	1
MySQL ODBC 5.1 Driver	5
SQL Server	2

Now specify the Connection Parameters as mentioned in the below dialog.


MySQL Connector/ODBC Data Source Configuration
MySQL
Connector/ODBC
Connection Parameters
Test
Details >>
OK
Cancel
Help

Data Source Name: eServer
Description:
Server: localhost
Port: 3306
User: root
Password: *******
Database: test

Connection Parameters:

Data Source Name: Enter ODBC data source name **eServer** or enter the name of the data source you want to access.

Description: Enter some text to identify the connection.

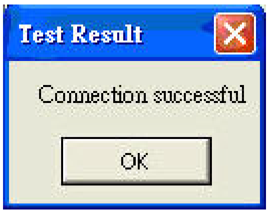
Server: Enter the default **localhost** or the name of MySQL server host that the users want to access.

User: Enter user name **root** to use for this connection.

Password: Enter the corresponding password for this connection.

Database: The list of databases that the user has permissions to access will be shown automatically.

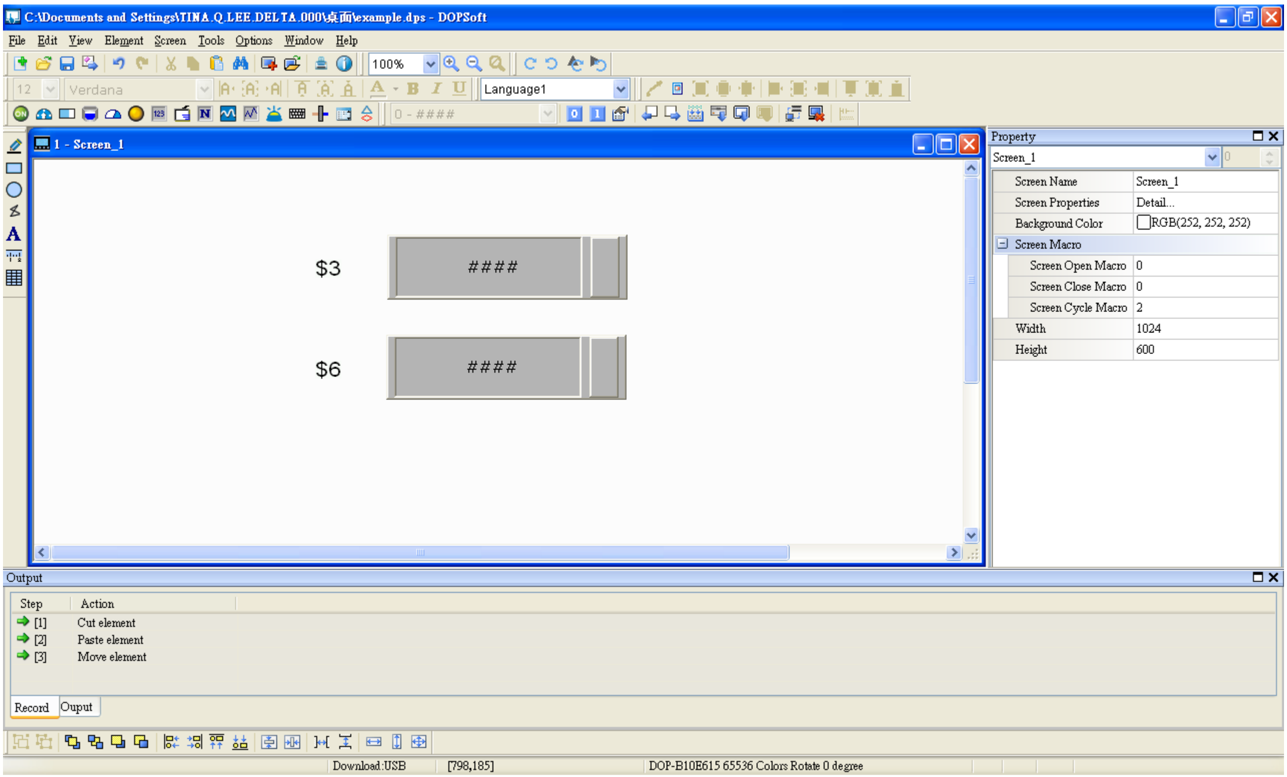
Click on **Test** button to verify the connection. If the test succeeds, the figure shown below will appear on the screen to indicate that MySQL connection is now available to use. At this time, click on **OK** button to complete the settings. If the test does not succeed, please review the settings.


Test Result

Connection successful

9.1.2 Create HMI Project File

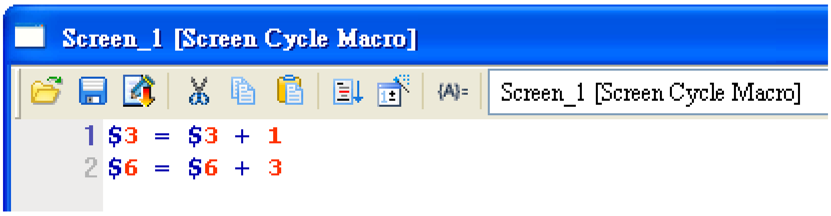
Start DOPSoft software program and click **File > New** or click **New** icon to create a new project. Then, click **Element > Input > Numeric Entry** to create two numeric entry elements ($3 and $6) on the screen. In this case, 10 inches color B10E615 type DOP series HMI is used.


C:\Documents and Settings\TINA.Q.LEE.DELTA.000\桌面\example.dps - DOPSoft
File Edit View Element Screen Tools Options Window Help
100%
Verdana
Language1
1 - Screen_1
$3
####
$6
####
Property
Screen_1
Output
Record
Ouput
Download:USB
[798,185]
DOP-B10E615 65536 Colors Rotate 0 degree

Screen Name	Screen_1
Screen Properties	Detail...
Background Color	RGB(252, 252, 252)
Screen Macro	
Screen Open Macro	0
Screen Close Macro	0
Screen Cycle Macro	2
Width	1024
Height	600

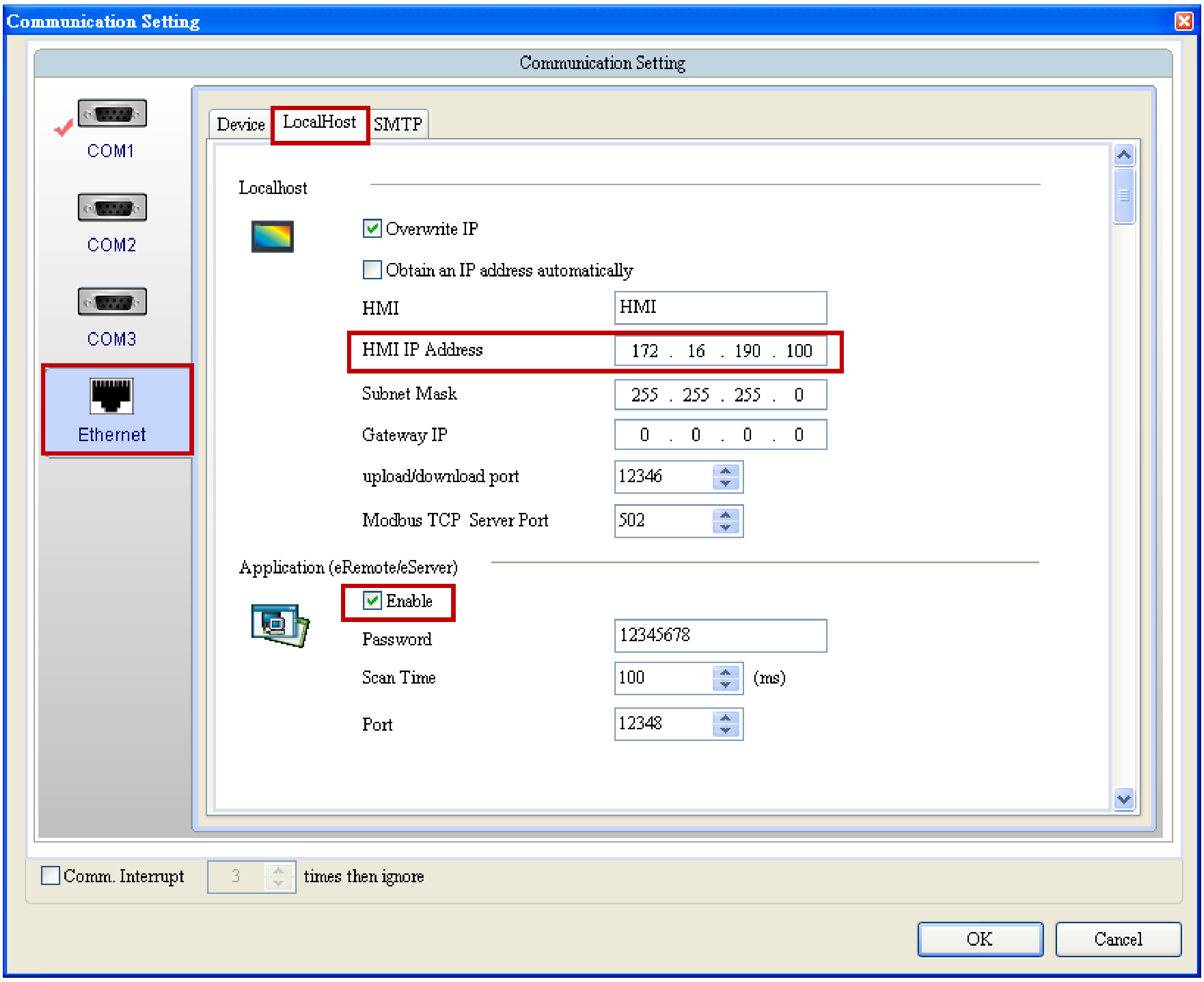
Step	Action
[1]	Cut element
[2]	Paste element
[3]	Move element

Use Screen Cycle Macro and enter the following commands in macro command window.


Screen_1 [Screen Cycle Macro]
Screen_1 [Screen Cycle Macro]

```
$3 = $3 + 1
$6 = $6 + 3
```

Click **Options > Communication Setting > Ethernet > LocalHost,** set HMI IP Address and check the Application(eRemote / eServer) function **Enable.** Then, press **OK** button to finish the settings.


Communication Setting
Communication Setting
COM1
COM2
COM3
Ethernet
Device
LocalHost
SMTP
OK
Cancel

Localhost

☑ Overwrite IP

☐ Obtain an IP address automatically

HMI: HMI

HMI IP Address: 172 . 16 . 190 . 100

Subnet Mask: 255 . 255 . 255 . 0

Gateway IP: 0 . 0 . 0 . 0

upload/download port: 12346

Modbus TCP Server Port: 502

Application (eRemote/eServer)

☑ Enable

Password: 12345678

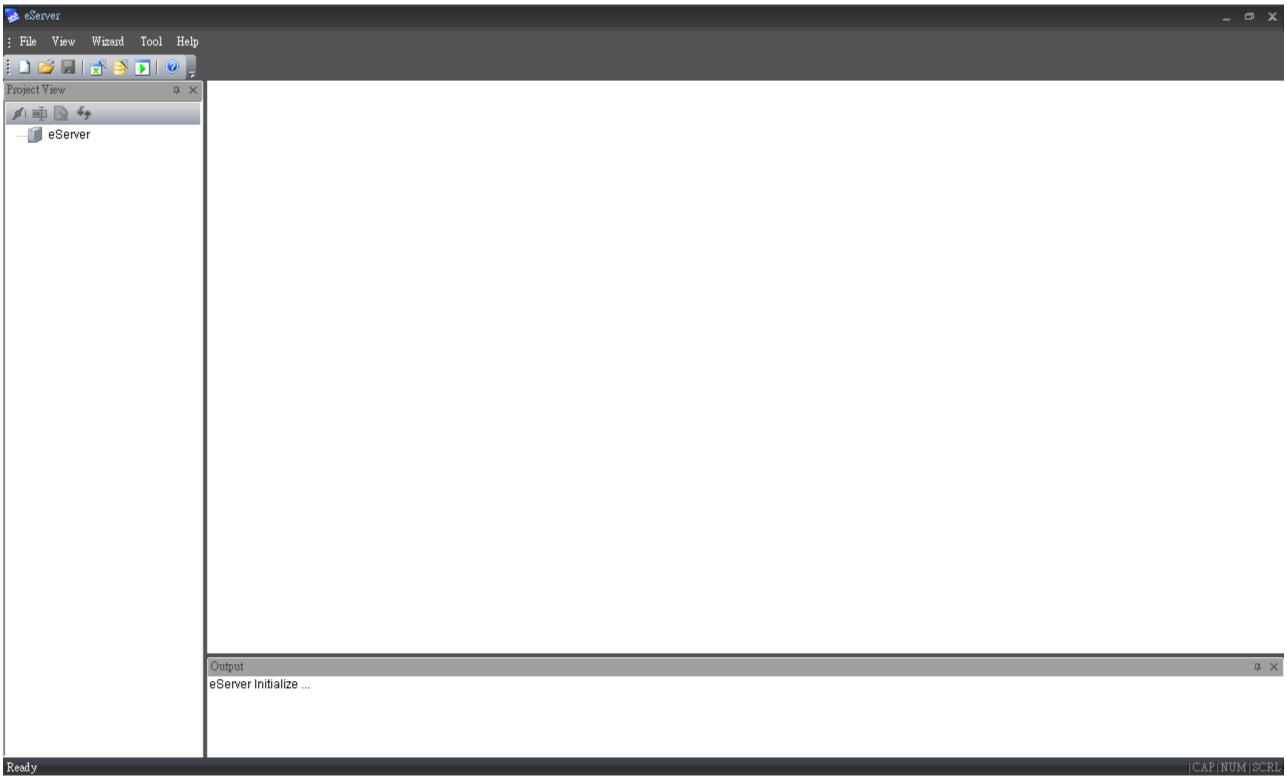
Scan Time: 100 (ms)

Port: 12348

☐ Comm. Interrupt 3 times then ignore

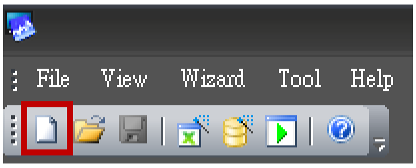
9.1.3 eServer Setting

1. After eServer is started, eServer window will open.

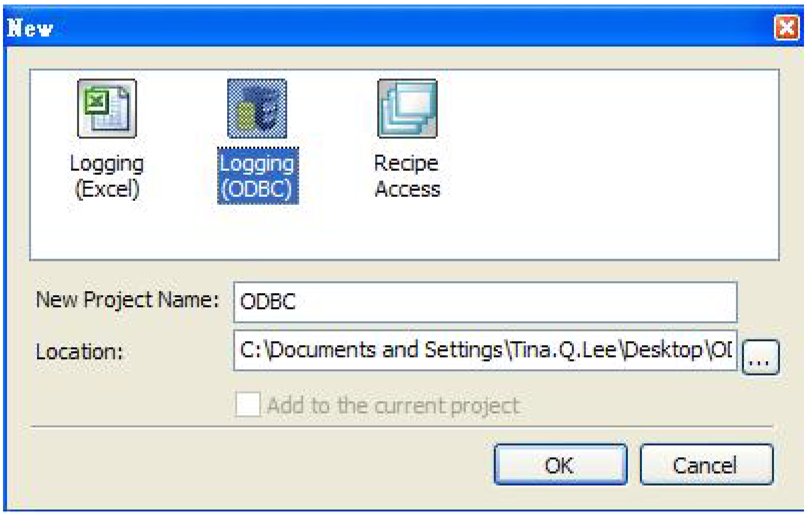

eServer
File View Wizard Tool Help
Project View
eServer
Output
Ready
CAP NUM SCRL

eServer Initialize ...

3. Click **File > New** or click icon to create a new project file.


File View Wizard Tool Help

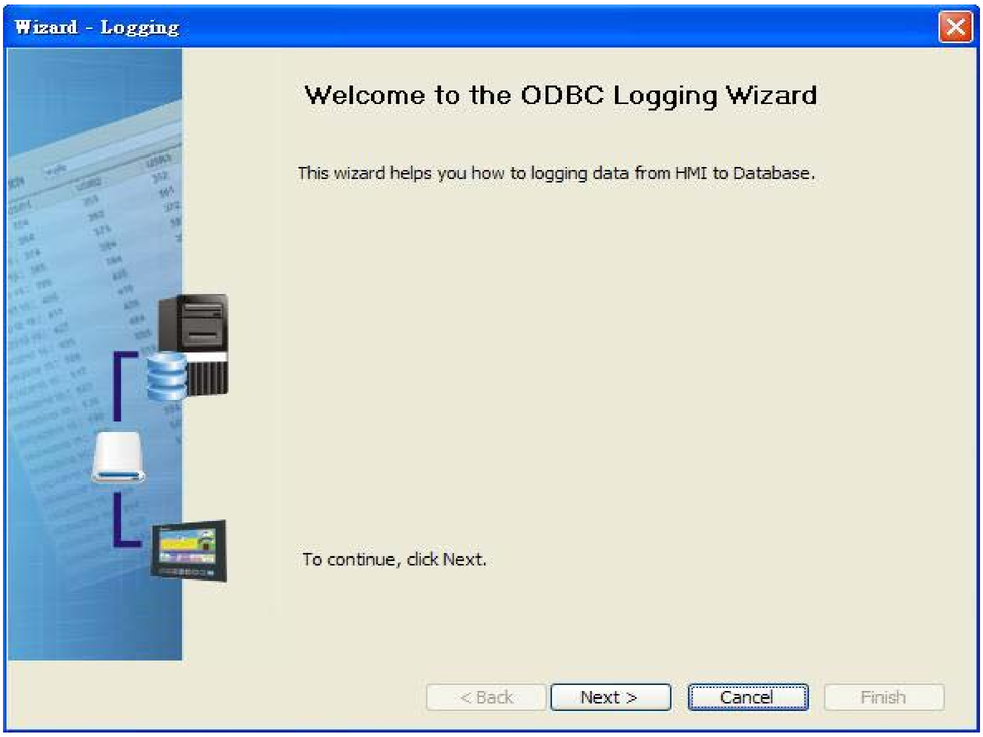
4. Select icon to enable ODBC Logging Wizard.


New
Logging (Excel)
Logging (ODBC)
Recipe Access
...
OK
Cancel

New Project Name: ODBC

Location: C:\Documents and Settings\Tina.Q.Lee\Desktop\OI

☐ Add to the current project



Wizard - Logging
< Back
Next >
Cancel
Finish

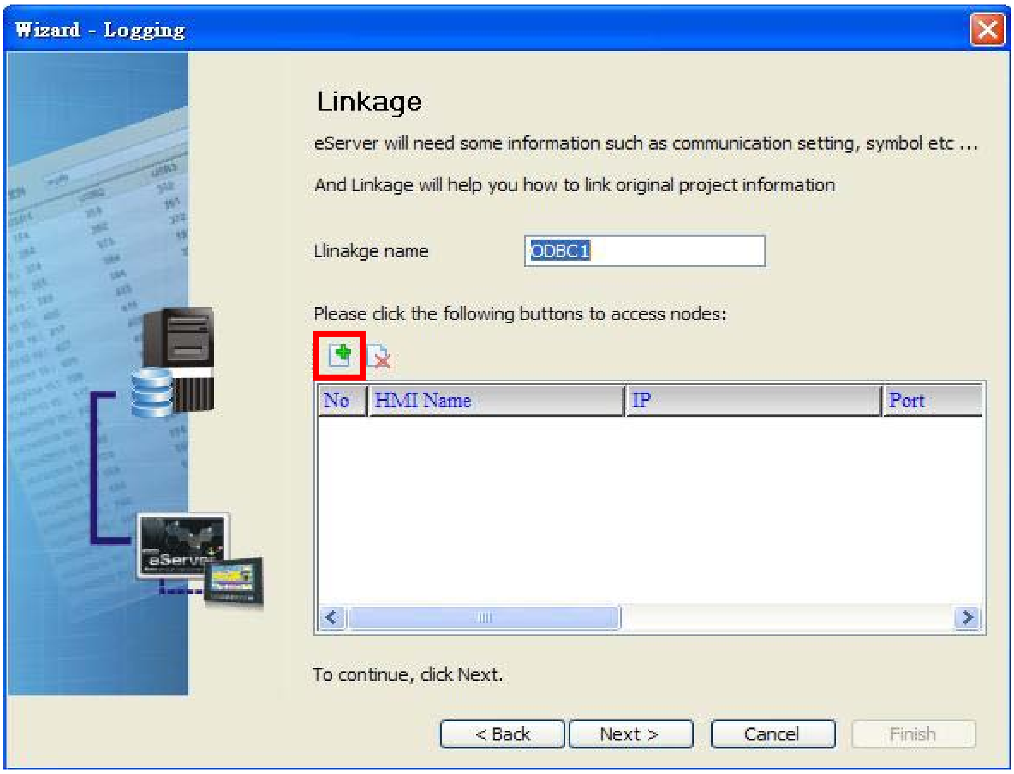
Welcome to the ODBC Logging Wizard

This wizard helps you how to logging data from HMI to Database.

To continue, click Next.

Press **Next** button to go to next step.

5. Click **New** icon to access nodes (link to HMI).



Wizard - Logging
eServer
< Back
Next >
Cancel
Finish

Linkage

eServer will need some information such as communication setting, symbol etc ...

And Linkage will help you how to link original project information

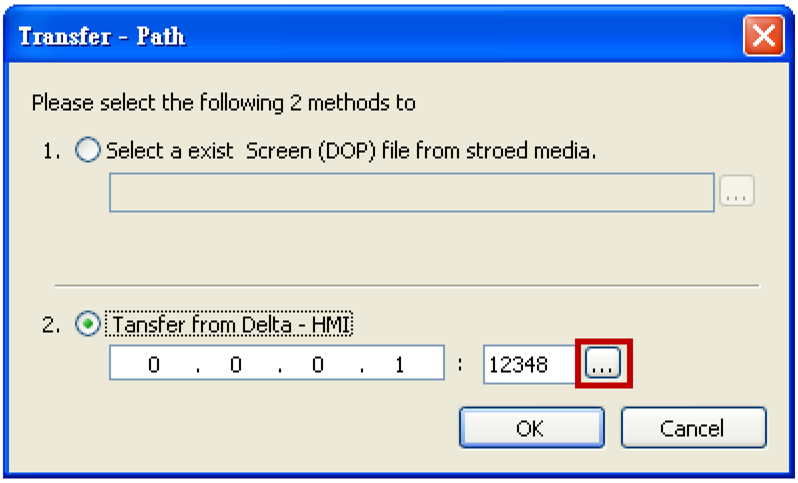
Llinakge name: ODBC1

Please click the following buttons to access nodes:

No	HMI Name	IP	Port

To continue, click Next.

Choose **Transfer from Delta – HMI** option to transfer the HMI screen project file via network communication directly.


Transfer - Path
...
OK
Cancel

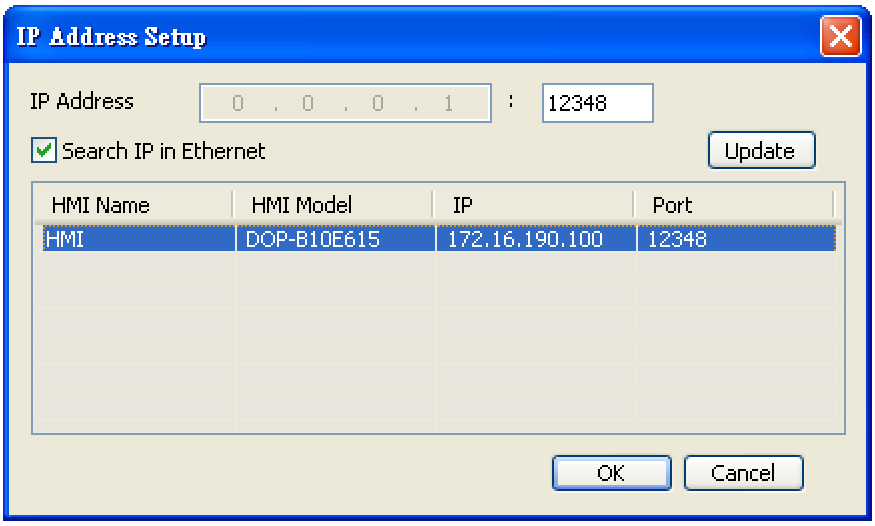
Please select the following 2 methods to

1. ○ Select a exist Screen (DOP) file from stroed media.

2. ● Tansfer from Delta - HMI

0 . 0 . 0 . 1 : 12348

After searching HMI IP in Ethernet, select HMI Name is HMI, IP is 172.16.190.100, press **OK**.

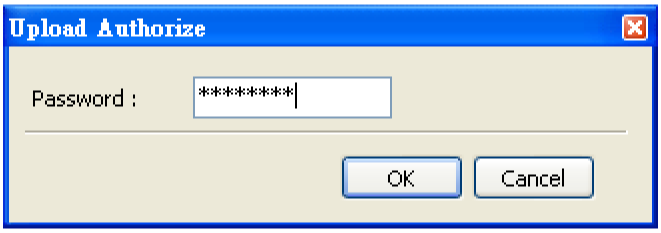

IP Address Setup
Update
OK
Cancel

IP Address 0 . 0 . 0 . 1 : 12348

☑ Search IP in Ethernet

HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348

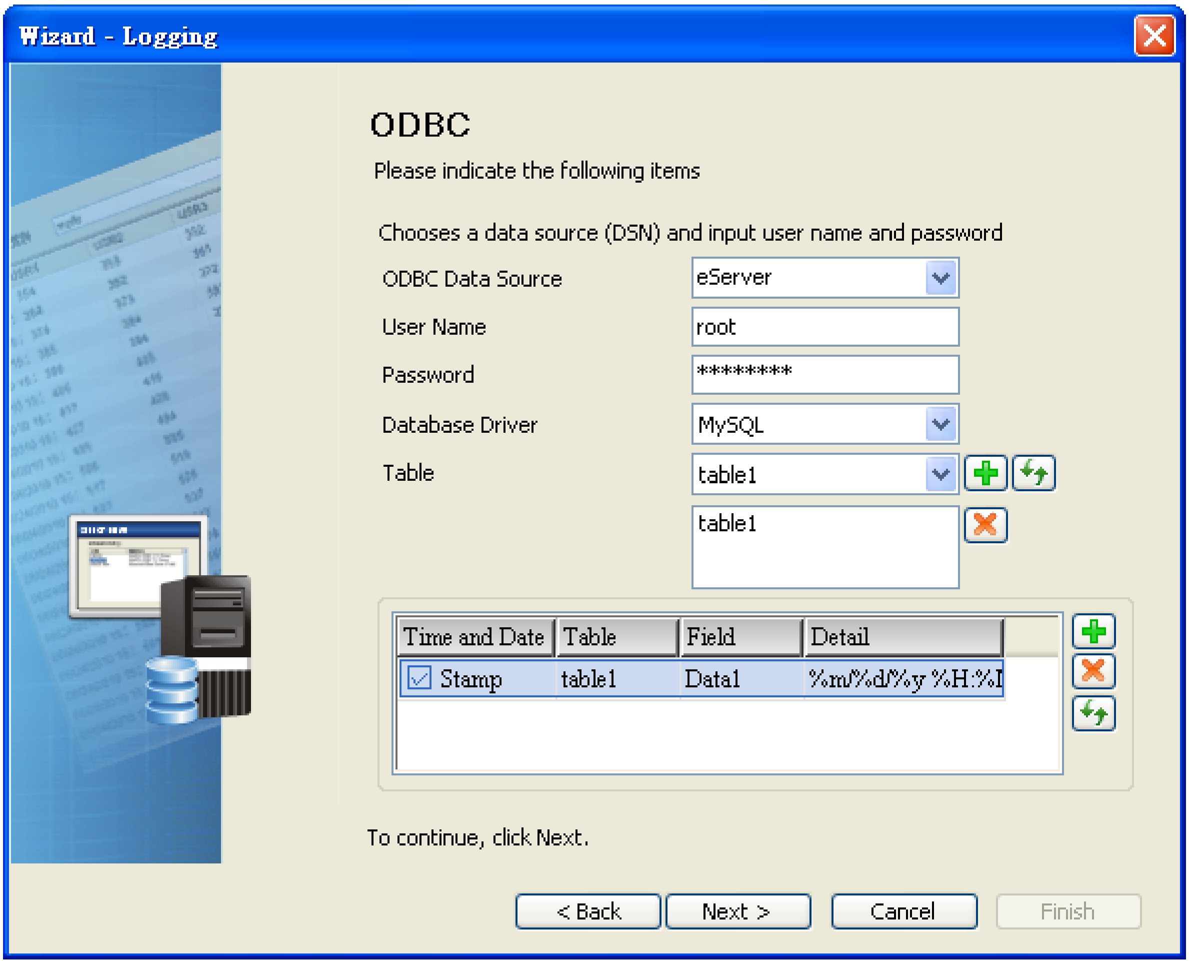
eServer will ask user to input the authorize password to connected with HMI. (The default password is 12345678.)


Upload Authorize
OK
Cancel

Password : ********

Press **OK** button to go to next step.

6. ODBC Data Source Setting: Create an ODBC Data Source pointing to your database. Please refer to the following settings and press refresh button to select table.



ODBC

Please indicate the following items

Chooses a data source (DSN) and input user name and password

ODBC Data Source: eServer

User Name: root

Password: ********

Database Driver: MySQL

Table: table1

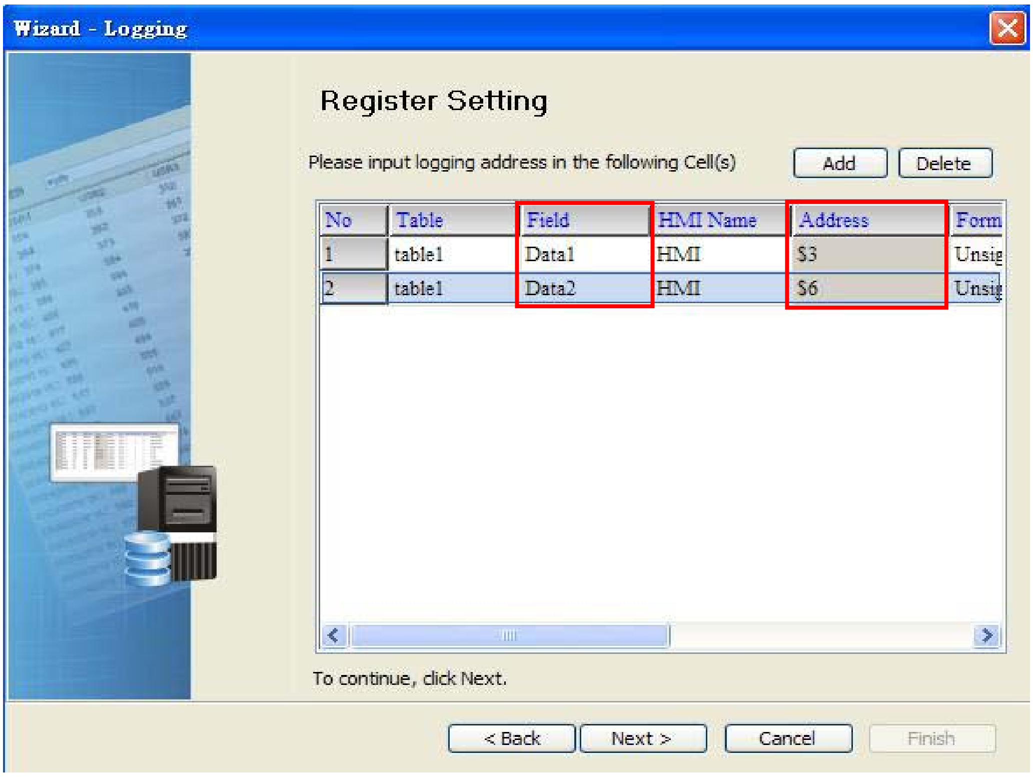
table1

Time and Date	Table	Field	Detail
☑ Stamp	table1	Data1	%m/%d/%y %H:%I

To continue, click Next.

Press **Next** button to go to next step.

7. Register Setting: Set the register address of the sampling data.


Wizard - Logging
Add
Delete
< Back
Next >
Cancel
Finish

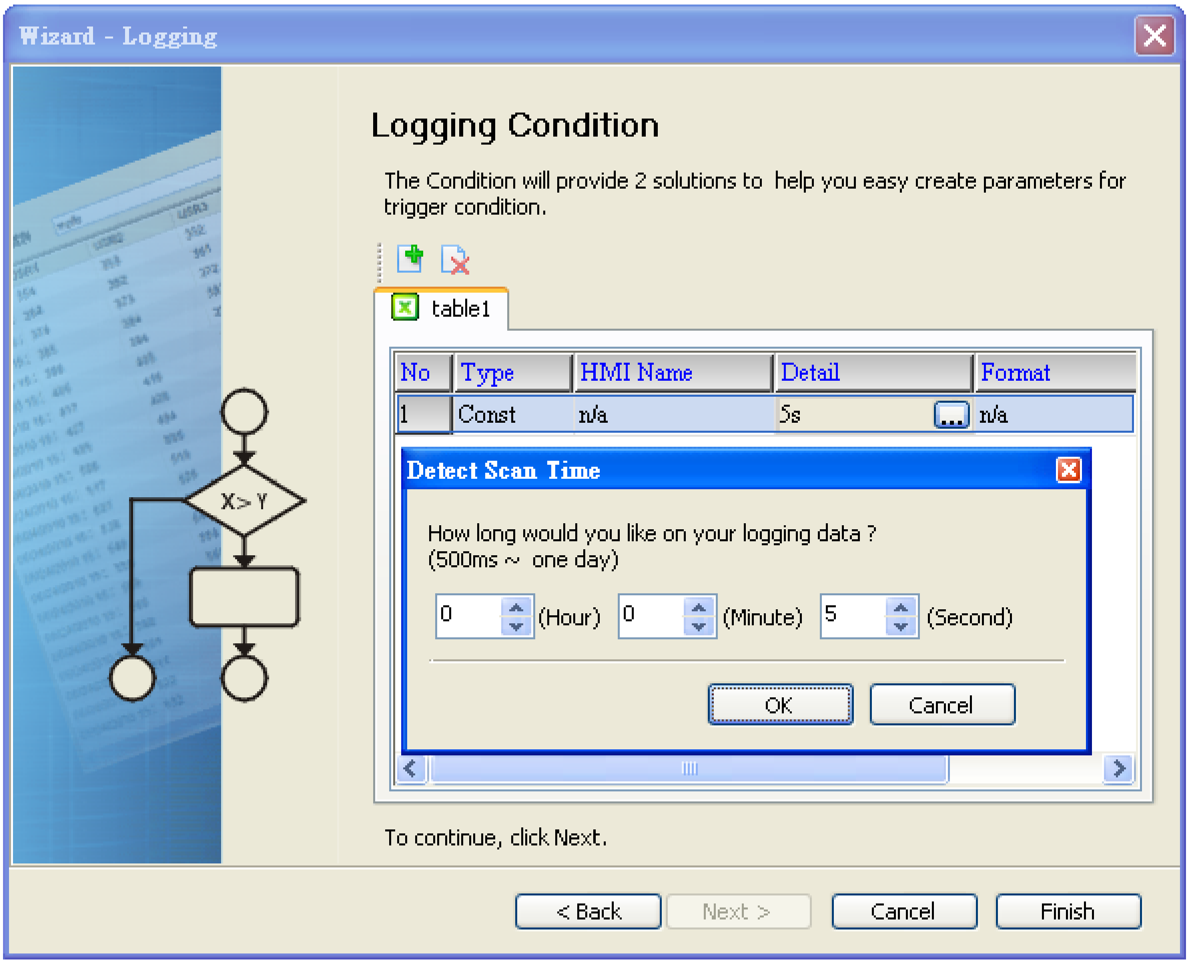
Register Setting

Please input logging address in the following Cell(s)

No	Table	Field	HMI Name	Address	Form
1	table1	Data1	HMI	$3	Unsig
2	table1	Data2	HMI	$6	Unsig

To continue, click Next.

9. Set the sampling conditions to constant **5s**. Press **Next** button to continue.


Wizard - Logging
X> Y
table1
Detect Scan Time
OK
Cancel
< Back
Next >
Cancel
Finish

Logging Condition

The Condition will provide 2 solutions to help you easy create parameters for trigger condition.

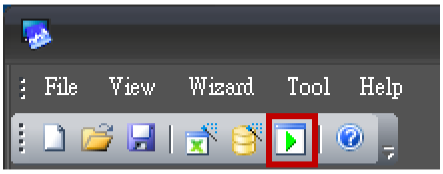
No	Type	HMI Name	Detail	Format
1	Const	n/a	5s	n/a

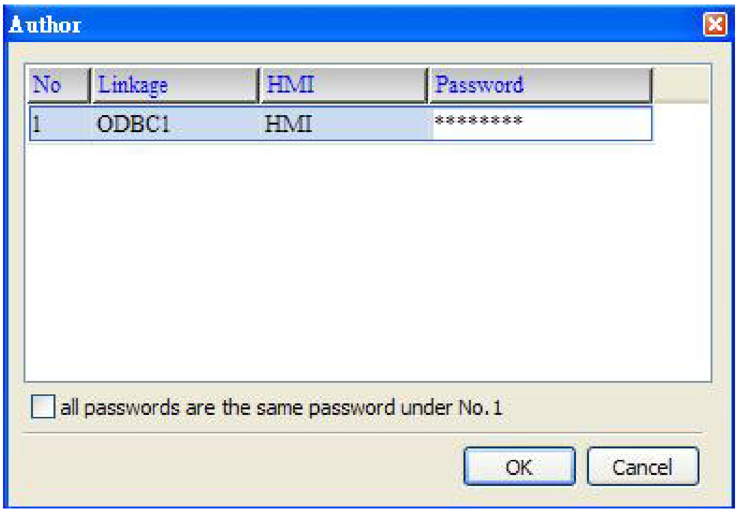
How long would you like on your logging data ?
(500ms ~ one day)

0 (Hour) 0 (Minute) 5 (Second)

To continue, click Next.

9. Press ▶ icon. After the password is entered, the system will start sampling operation, i.e. writing data in MySQL Server.


File
View
Wizard
Tool
Help

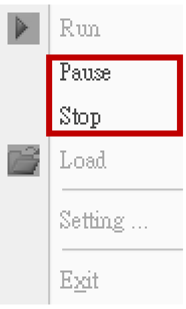

Author

No	Linkage	HMI	Password
1	ODBC1	HMI	********

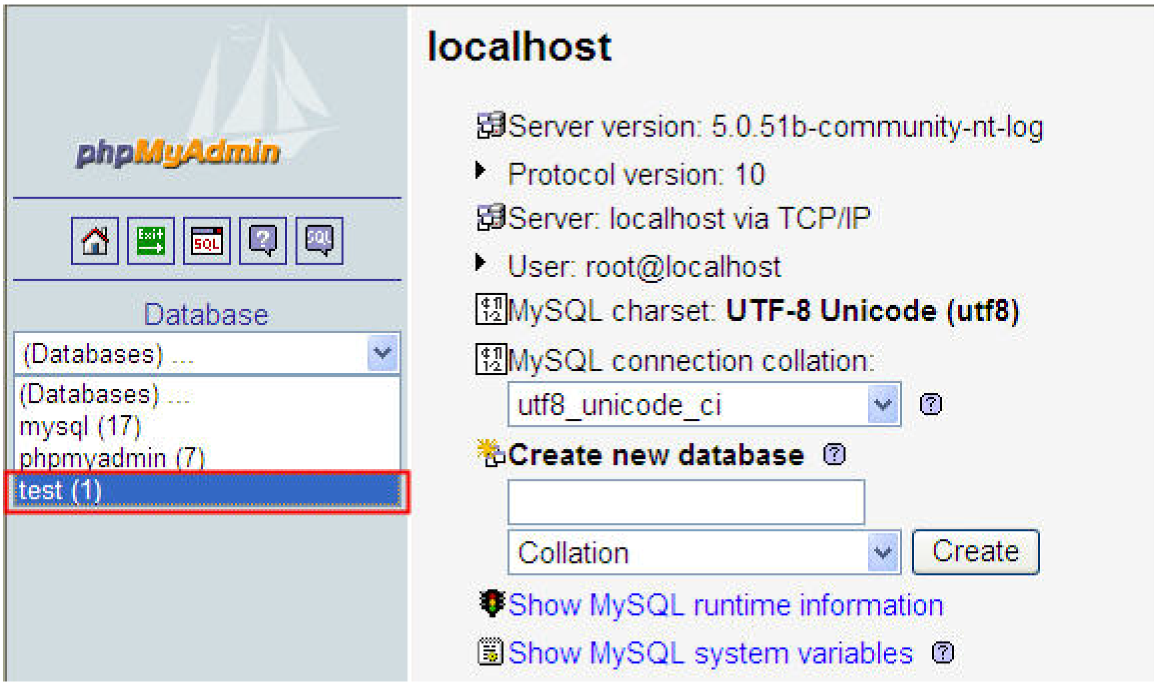
☐ all passwords are the same password under No.1

OK
Cancel

10. If the users want to pause or stop the sampling operation, only right-click eServer icon at the bottom right of Windows screen and select Pause or Stop option from the pop-up menu, the sampling operation will pause and stop immediately.


Run
Pause
Stop
Load
Setting ...
Exit

11. Open the browser, type: http://localhost/phpMyAdmin/, and select the test database from the Database drop-down menu.


phpMyAdmin
Database
(Databases) ...
(Databases) ...
mysql (17)
phpmyadmin (7)
test (1)
Create
Show MySQL runtime information
Show MySQL system variables

localhost

Server version: 5.0.51b-community-nt-log

Protocol version: 10

Server: localhost via TCP/IP

User: root@localhost

MySQL charset: **UTF-8 Unicode (utf8)**

MySQL connection collation: utf8_unicode_ci

Create new database

Collation

12. Click on **Structure** link.

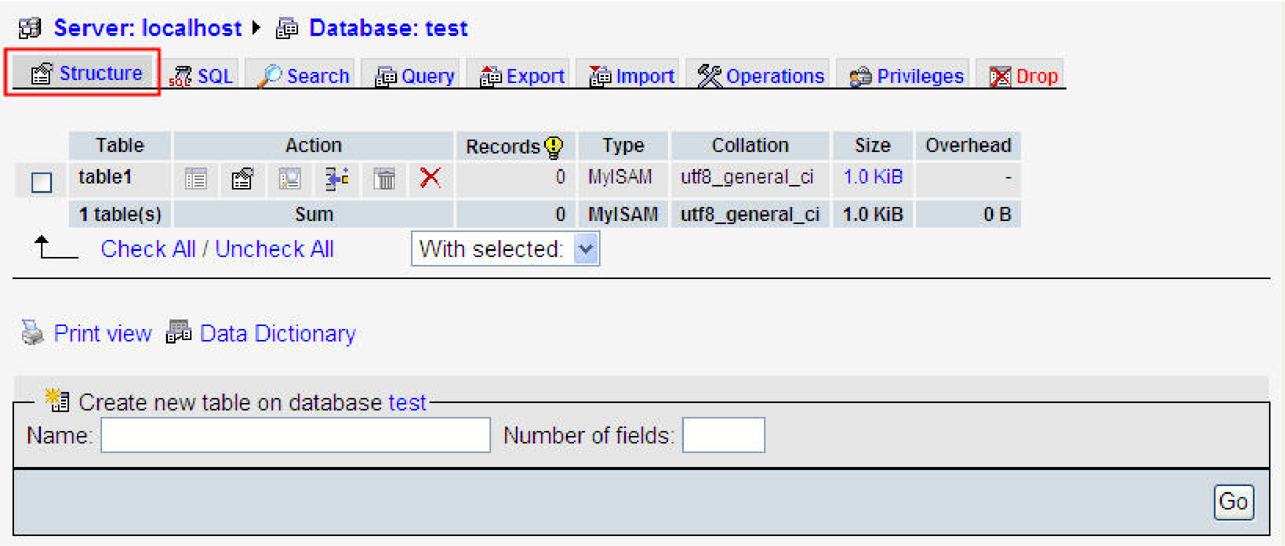
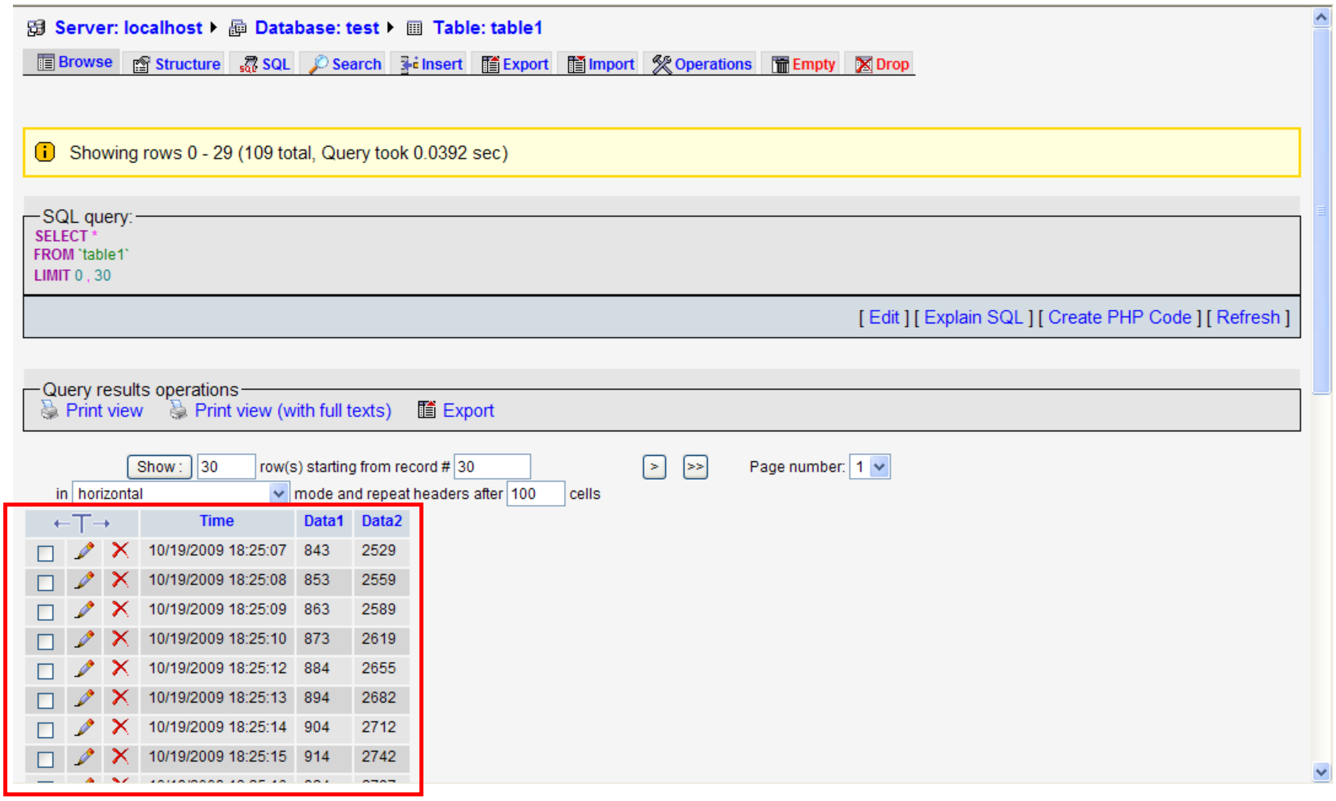

Server: localhost
Database: test
Structure
SQL
Search
Query
Export
Import
Operations
Privileges
Drop
Check All / Uncheck All
With selected:
Print view
Data Dictionary
Go

	Table	Action	Records	Type	Collation	Size	Overhead
☐	table1		0	MyISAM	utf8_general_ci	1.0 KiB	-
	1 table(s)	Sum	0	MyISAM	utf8_general_ci	1.0 KiB	0 B

Create new table on database test

Name: Number of fields:

13. The recorded data will be shown at the bottom of the window.


Server: localhost
Database: test
Table: table1
Browse
Structure
SQL
Search
Insert
Export
Import
Operations
Empty
Drop
[Edit] [Explain SQL] [Create PHP Code] [Refresh]
Query results operations
Print view
Print view (with full texts)
Export
>
>>

Showing rows 0 - 29 (109 total, Query took 0.0392 sec)

SQL query:

```
SELECT *
FROM `table1`
LIMIT 0 , 30
```

Show : 30 row(s) starting from record # 30

Page number: 1

in horizontal mode and repeat headers after 100 cells

←T→	Time	Data1	Data2
☐	10/19/2009 18:25:07	843	2529
☐	10/19/2009 18:25:08	853	2559
☐	10/19/2009 18:25:09	863	2589
☐	10/19/2009 18:25:10	873	2619
☐	10/19/2009 18:25:12	884	2655
☐	10/19/2009 18:25:13	894	2682
☐	10/19/2009 18:25:14	904	2712
☐	10/19/2009 18:25:15	914	2742

Chapter 10 Writing Data in Oracle

Before creating testing example, make sure to change the upload and download option (**Options > Environment**) on DOPSoft first. The default setting of upload and download is via **USB**. If the users need to use **Ethernet**, please change the default setting by referring to **Appendix A**.

10.1 Example

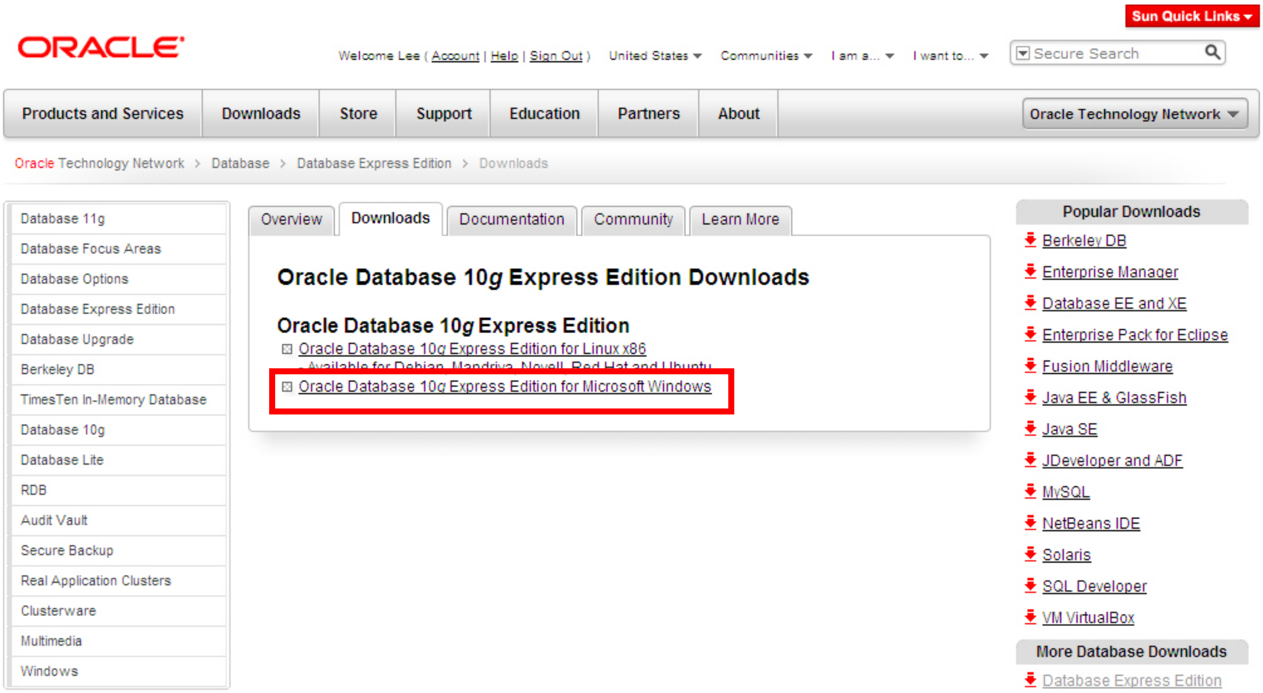
This example is used to help the users to understand how to use eServer to read the data of the register addresses $3 and $6 every second, record the data in Oracle via ODBC interface, and save the collected data into the specified folder (C:\Data).

10.1.1 Software Installation

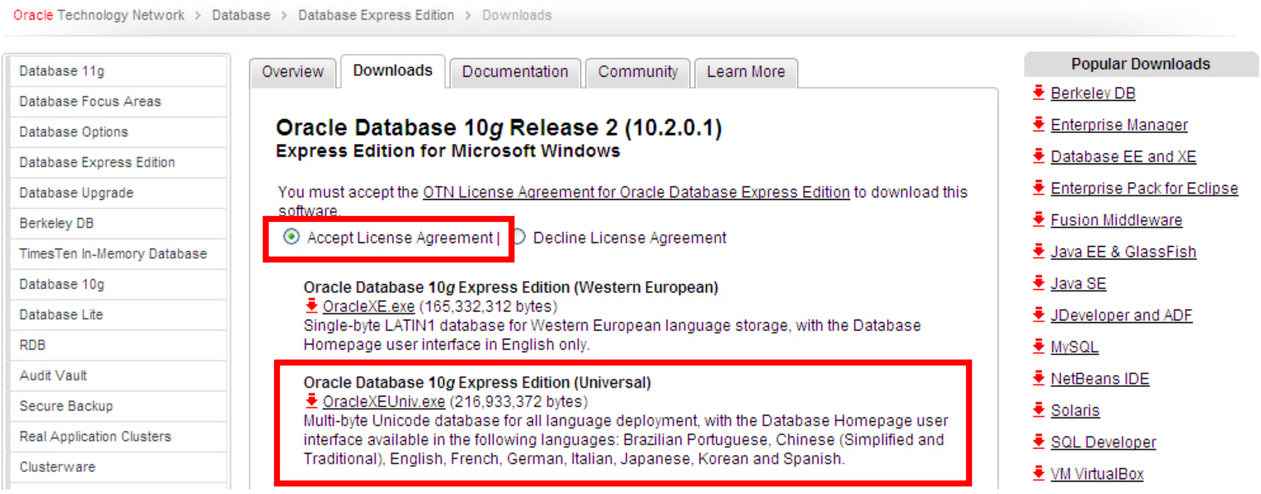
1. Oracle Introduction

   Oracle is a free and a database management system produced and marketed by Oracle Corporation. In this example, To download it, go to http://www.oracle.com/technetwork/database/express-edition/downloads/index.html.

   Please be sure to select **Oracle Database 10g** for **Microsoft Windows**.


Sun Quick Links
ORACLE
Welcome Lee (Account | Help | Sign Out)
United States
Communities
I am a...
I want to...
Secure Search
Products and Services
Downloads
Store
Support
Education
Partners
About
Oracle Technology Network
Oracle Technology Network > Database > Database Express Edition > Downloads
Database 11g
Database Focus Areas
Database Options
Database Express Edition
Database Upgrade
Berkeley DB
TimesTen In-Memory Database
Database 10g
Database Lite
RDB
Audit Vault
Secure Backup
Real Application Clusters
Clusterware
Multimedia
Windows
Overview
Downloads
Documentation
Community
Learn More
Oracle Database 10g Express Edition Downloads
Oracle Database 10g Express Edition
Oracle Database 10g Express Edition for Linux x86
- Available for Debian, Mandriva, Novell, Red Hat and Ubuntu
Oracle Database 10g Express Edition for Microsoft Windows
Popular Downloads
Berkeley DB
Enterprise Manager
Database EE and XE
Enterprise Pack for Eclipse
Fusion Middleware
Java EE & GlassFish
Java SE
JDeveloper and ADF
MySQL
NetBeans IDE
Solaris
SQL Developer
VM VirtualBox
More Database Downloads
Database Express Edition

Then, accept the license agreement and download **OracleXEUniv.exe**, which is the multi-byte Unicode database for all language deployment.


Oracle Technology Network > Database > Database Express Edition > Downloads
Database 11g
Database Focus Areas
Database Options
Database Express Edition
Database Upgrade
Berkeley DB
TimesTen In-Memory Database
Database 10g
Database Lite
RDB
Audit Vault
Secure Backup
Real Application Clusters
Clusterware
Overview
Downloads
Documentation
Community
Learn More
Popular Downloads
Berkeley DB
Enterprise Manager
Database EE and XE
Enterprise Pack for Eclipse
Fusion Middleware
Java EE & GlassFish
Java SE
JDeveloper and ADF
MySQL
NetBeans IDE
Solaris
SQL Developer
VM VirtualBox

Oracle Database 10*g* Release 2 (10.2.0.1)
Express Edition for Microsoft Windows

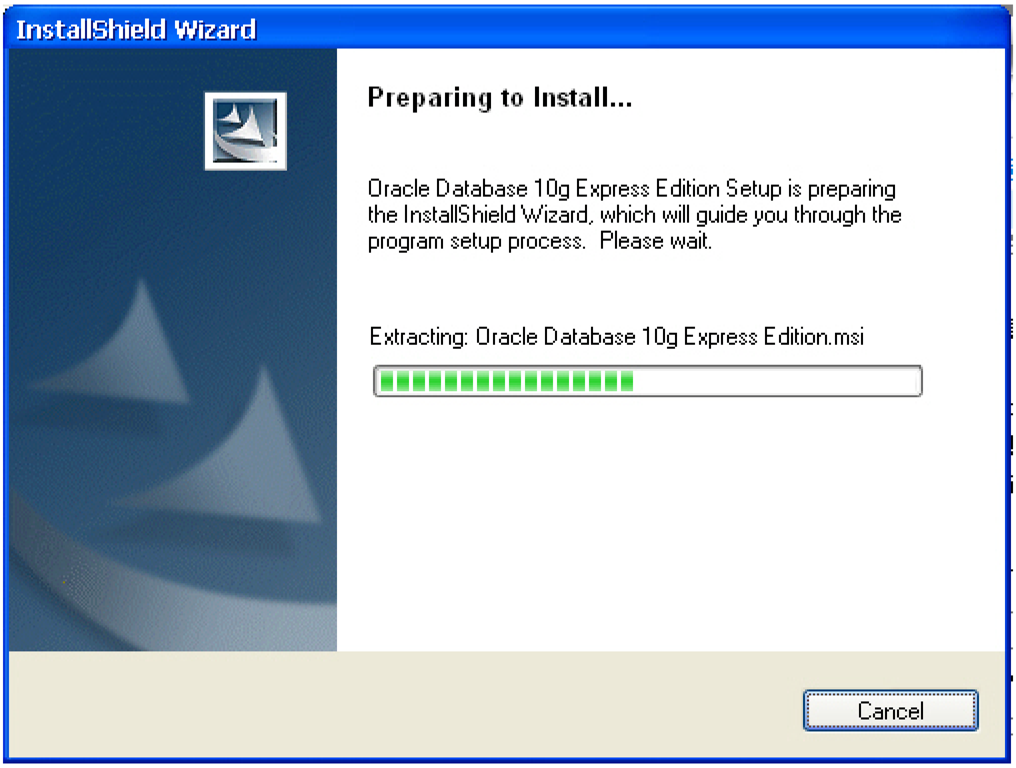
You must accept the OTN License Agreement for Oracle Database Express Edition to download this software.

● Accept License Agreement | ○ Decline License Agreement

Oracle Database 10*g* Express Edition (Western European)
OracleXE.exe (165,332,312 bytes)
Single-byte LATIN1 database for Western European language storage, with the Database Homepage user interface in English only.

Oracle Database 10*g* Express Edition (Universal)
OracleXEUniv.exe (216,933,372 bytes)
Multi-byte Unicode database for all language deployment, with the Database Homepage user interface available in the following languages: Brazilian Portuguese, Chinese (Simplified and Traditional), English, French, German, Italian, Japanese, Korean and Spanish.

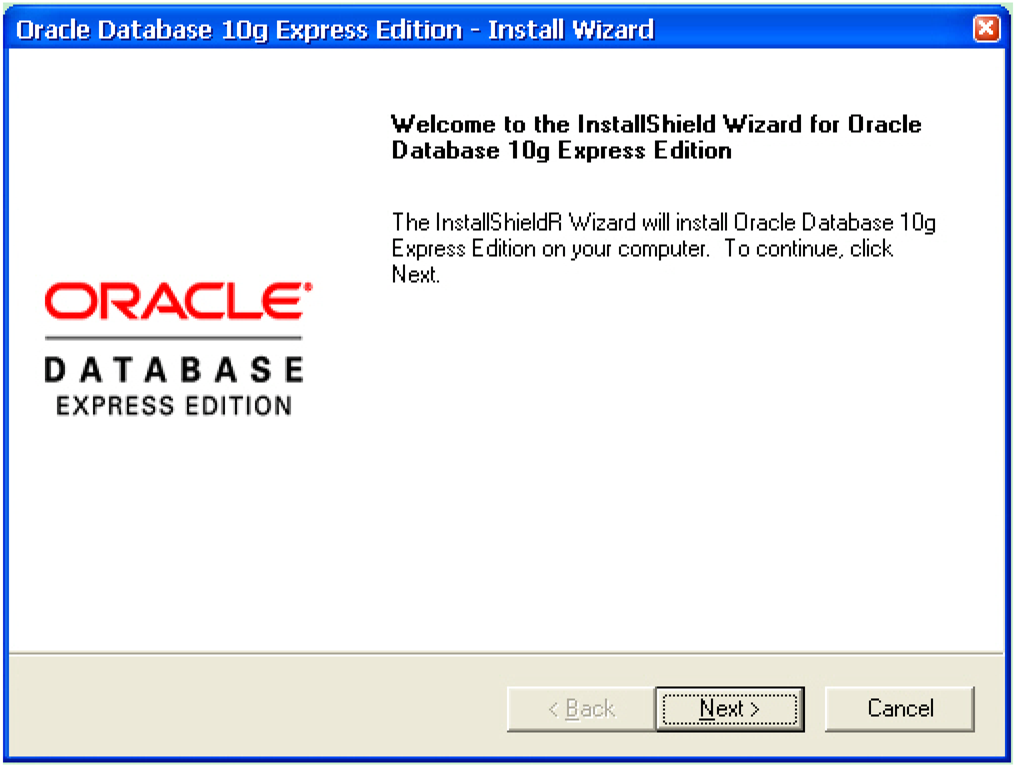
After downloading **OracleXEUniv.exe**, click on **Run** button to install Oracle.


InstallShield Wizard
Cancel

Preparing to Install...

Oracle Database 10g Express Edition Setup is preparing the InstallShield Wizard, which will guide you through the program setup process. Please wait.

Extracting: Oracle Database 10g Express Edition.msi



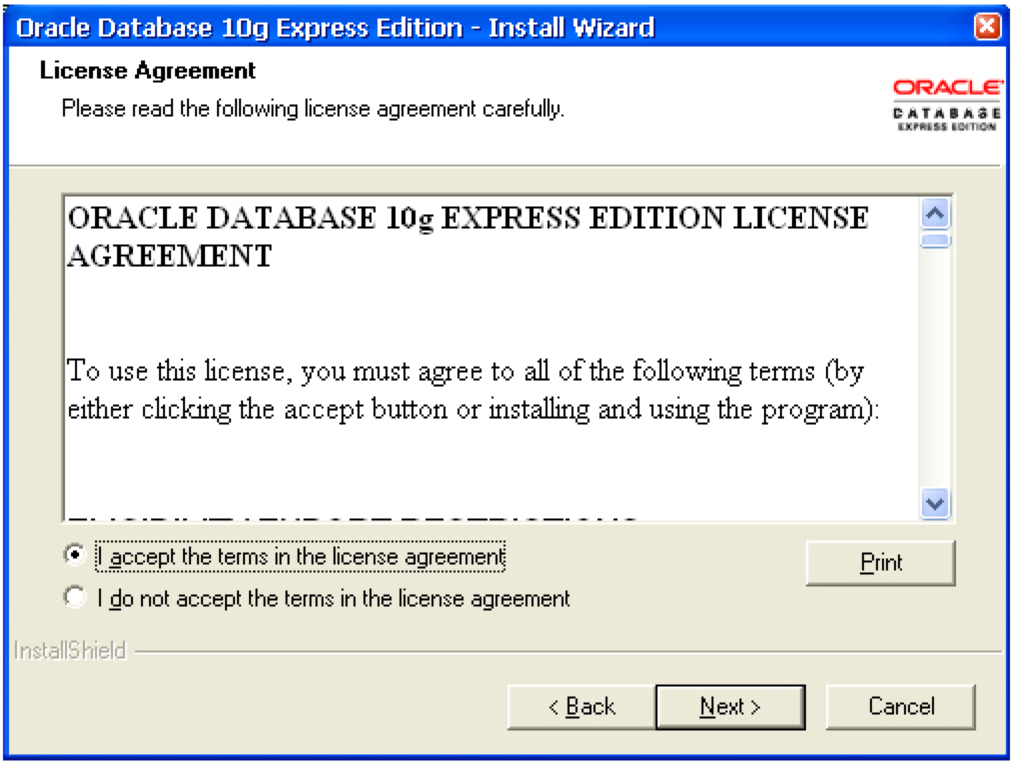
Oracle Database 10g Express Edition - Install Wizard

Welcome to the InstallShield Wizard for Oracle Database 10g Express Edition

The InstallShieldR Wizard will install Oracle Database 10g Express Edition on your computer. To continue, click Next.

ORACLE
DATABASE
EXPRESS EDITION
< Back
Next >
Cancel

Click on **Next** button to go to the next step.



Oracle Database 10g Express Edition - Install Wizard

License Agreement

Please read the following license agreement carefully.

ORACLE DATABASE 10g EXPRESS EDITION LICENSE AGREEMENT

To use this license, you must agree to all of the following terms (by either clicking the accept button or installing and using the program):

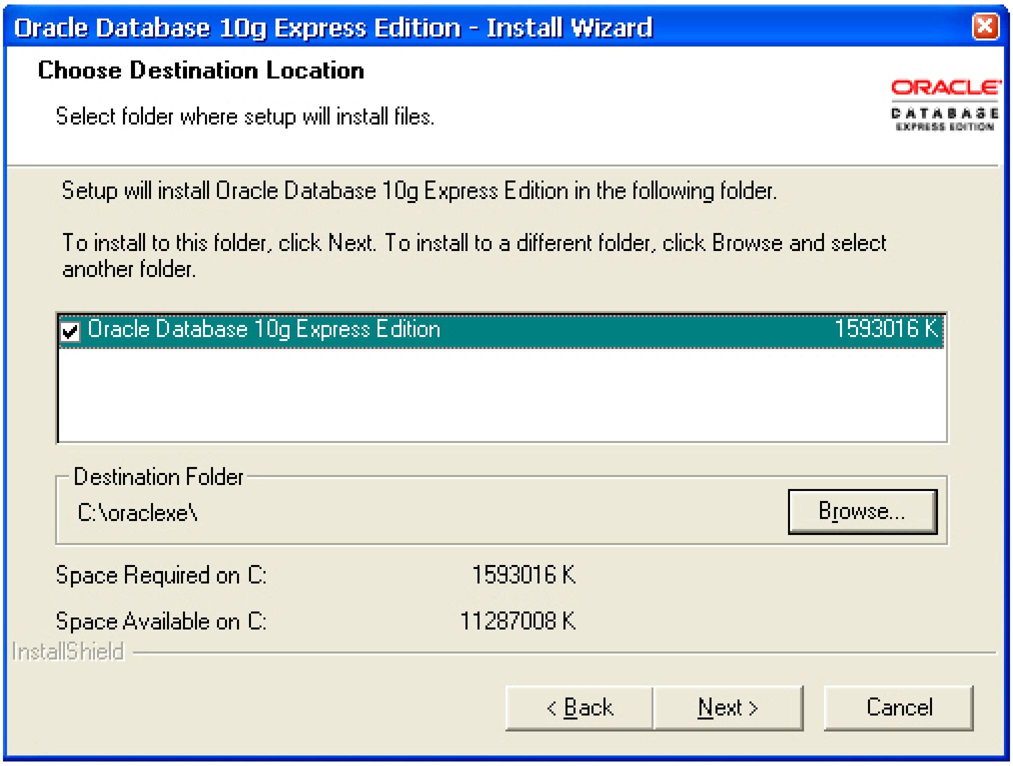
● I accept the terms in the license agreement

○ I do not accept the terms in the license agreement

ORACLE
DATABASE
EXPRESS EDITION
Print
InstallShield
< Back
Next >
Cancel

The users must read license agreement before installation. Choose **I accept the terms in the license agreement** to continue.

Click on **Next** button to go to the next step.



Oracle Database 10g Express Edition - Install Wizard

Choose Destination Location

Select folder where setup will install files.

Setup will install Oracle Database 10g Express Edition in the following folder.

To install to this folder, click Next. To install to a different folder, click Browse and select another folder.

☑ Oracle Database 10g Express Edition 1593016 K

Destination Folder

C:\oraclexe\

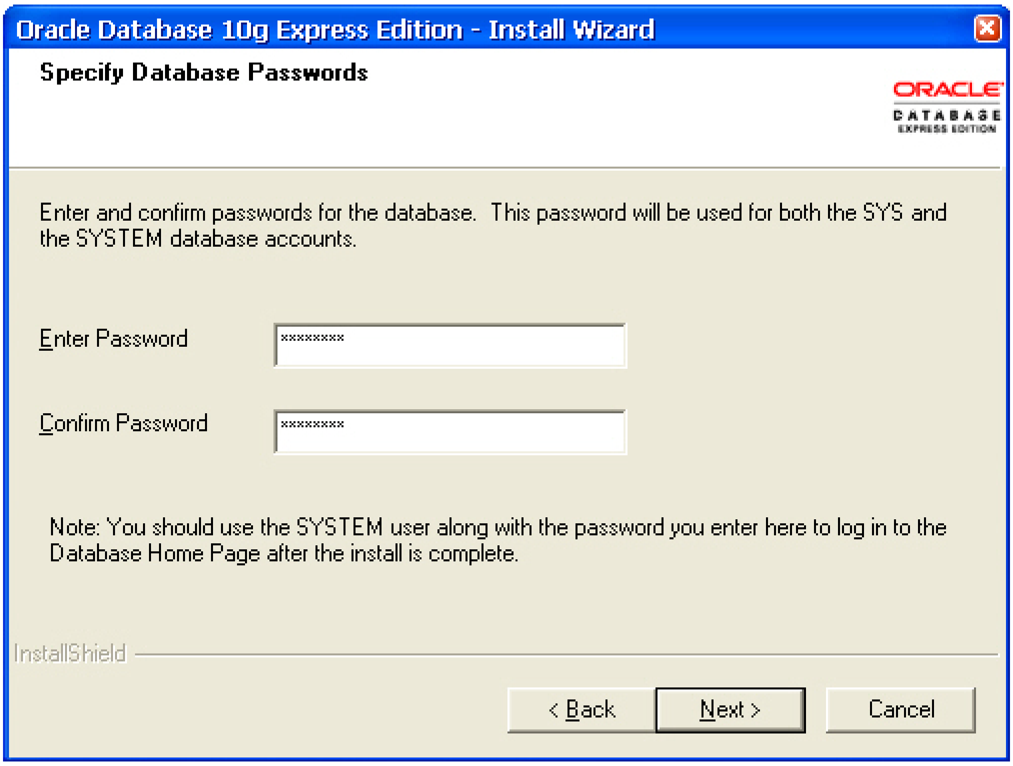
Space Required on C: 1593016 K

Space Available on C: 11287008 K

ORACLE DATABASE EXPRESS EDITION
Browse...
InstallShield
< Back
Next >
Cancel

Select the default directory C:\oraclexe, and click on **Next** button for the next step.

To select a directory other than the default directory, click **Browse**.



Oracle Database 10g Express Edition - Install Wizard

Specify Database Passwords

Enter and confirm passwords for the database. This password will be used for both the SYS and the SYSTEM database accounts.

Enter Password ********

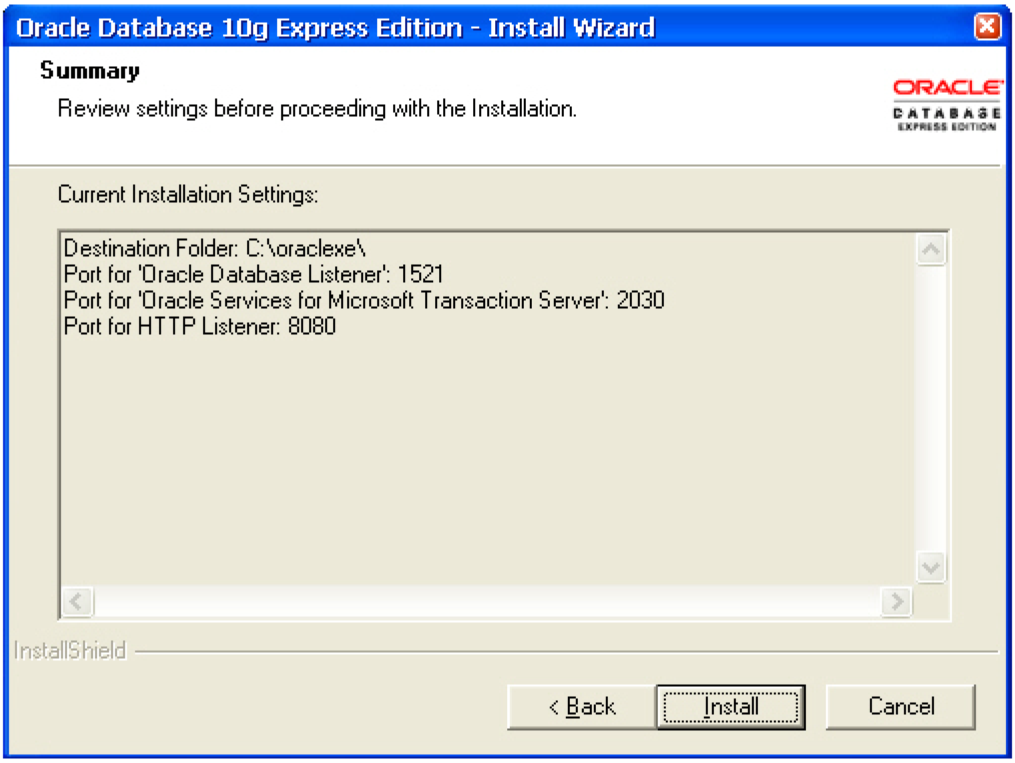
Confirm Password ********

Note: You should use the SYSTEM user along with the password you enter here to log in to the Database Home Page after the install is complete.

ORACLE DATABASE EXPRESS EDITION
InstallShield
< Back
Next >
Cancel

Then, enter and confirm the password for the database.

Click on **Next** button for the next step.



Oracle Database 10g Express Edition - Install Wizard

Summary

Review settings before proceeding with the Installation.

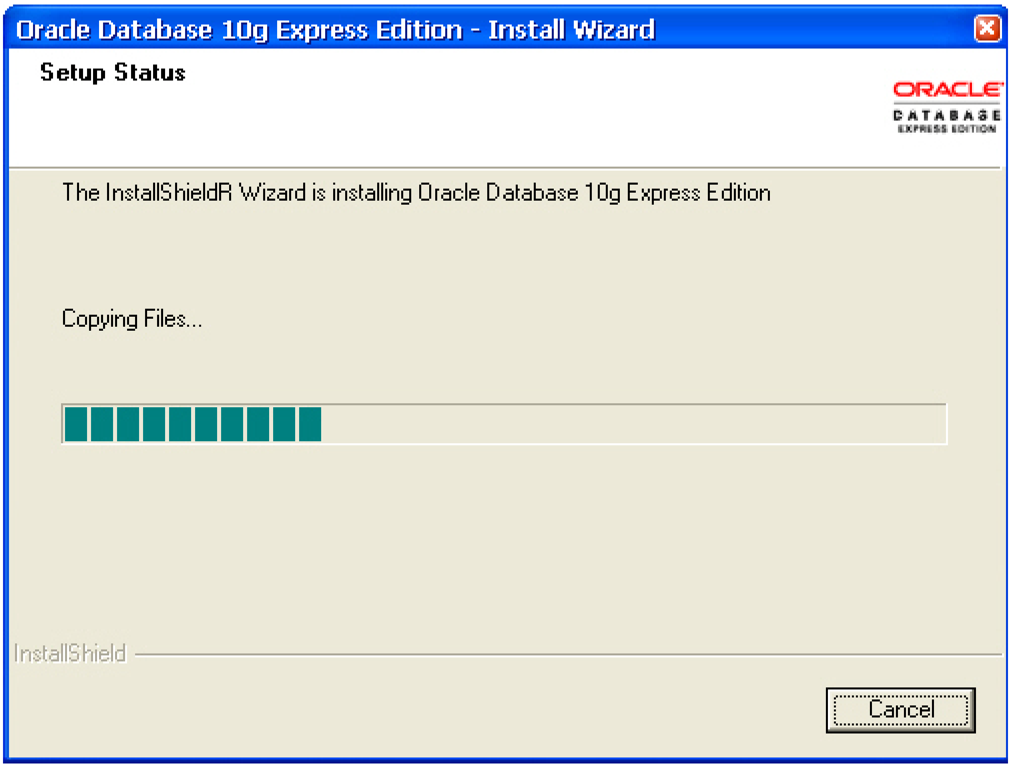
Current Installation Settings:

Destination Folder: C:\oraclexe\
Port for 'Oracle Database Listener': 1521
Port for 'Oracle Services for Microsoft Transaction Server': 2030
Port for HTTP Listener: 8080

ORACLE
DATABASE
EXPRESS EDITION
InstallShield
< Back
Install
Cancel

The users can review the settings before proceeding with the Installation.

Click on **Install** button to installing **Oracle Database 10g**.



Oracle Database 10g Express Edition - Install Wizard

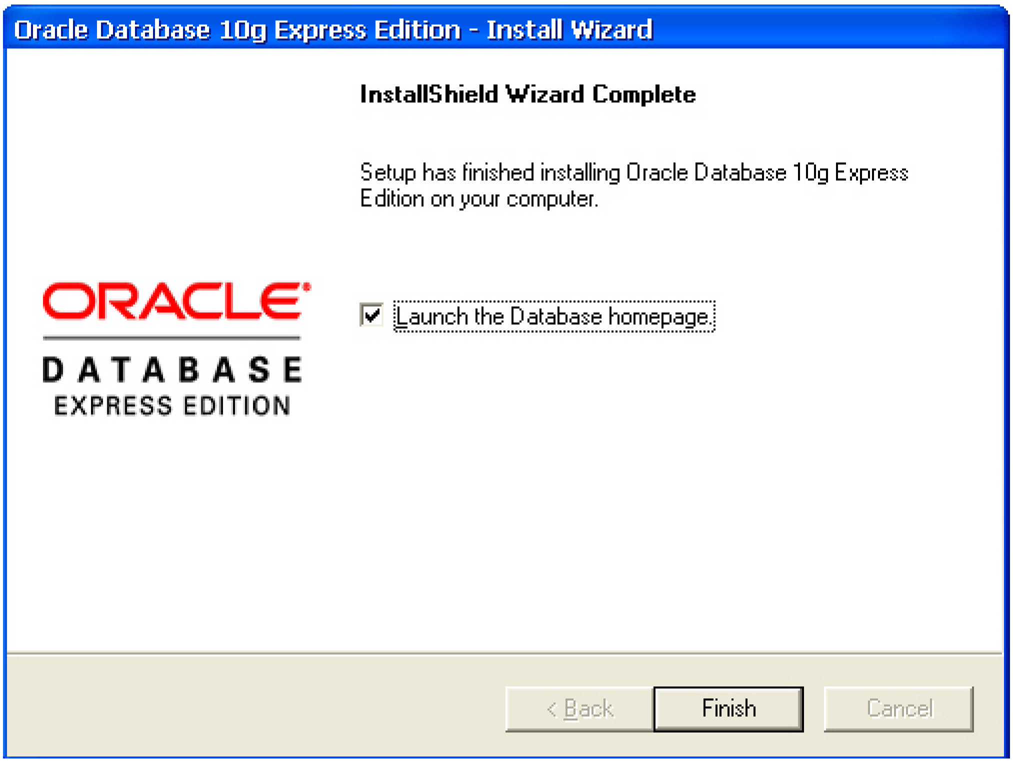
Setup Status

The InstallShieldR Wizard is installing Oracle Database 10g Express Edition

Copying Files...

ORACLE
DATABASE
EXPRESS EDITION
InstallShield
Cancel

The installation wizard is installing **Oracle Database 10g**.



Oracle Database 10g Express Edition - Install Wizard
ORACLE
DATABASE
EXPRESS EDITION
< Back
Finish
Cancel

InstallShield Wizard Complete

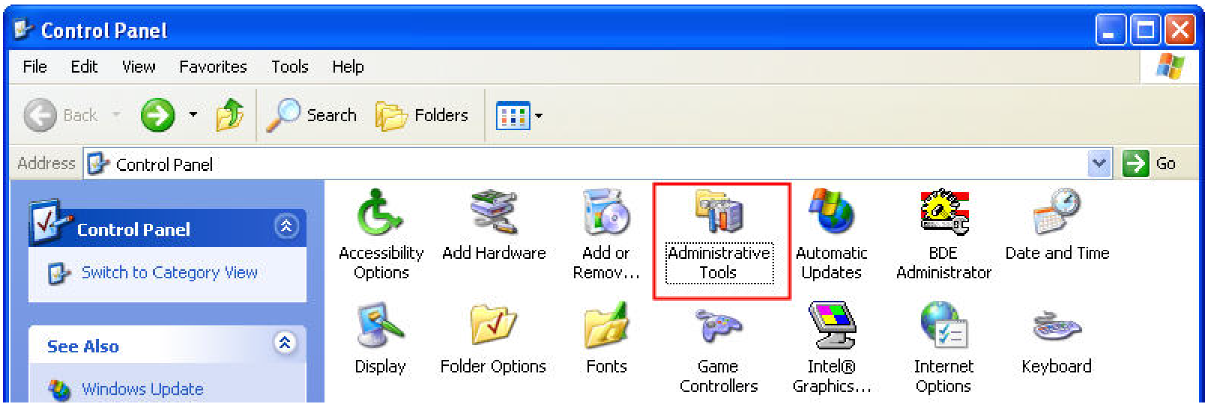
Setup has finished installing Oracle Database 10g Express Edition on your computer.

☑ Launch the Database homepage

Click on **Finish** button to complete **Oracle Database 10g** setup.

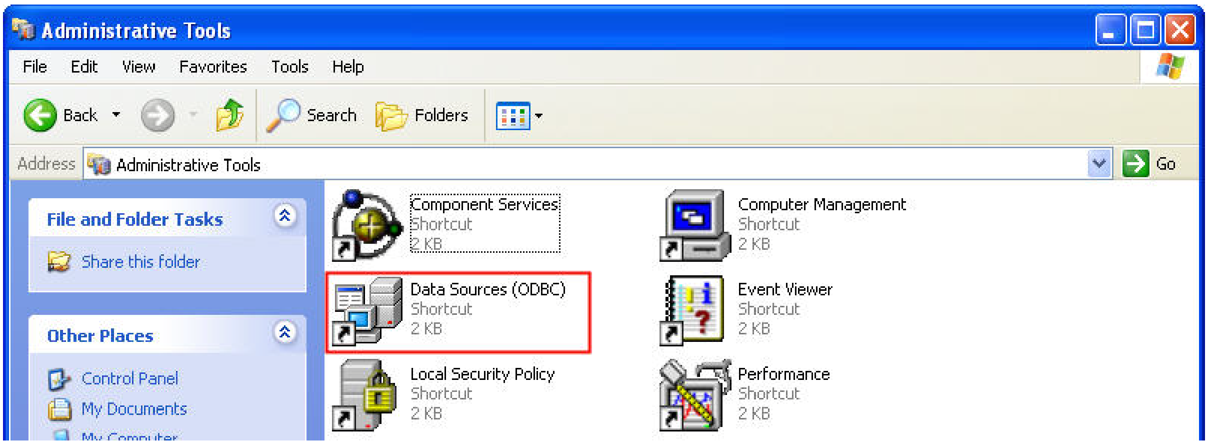
2. ODBC Setup

In the **Control Panel**, double-click **Administrative Tools**.



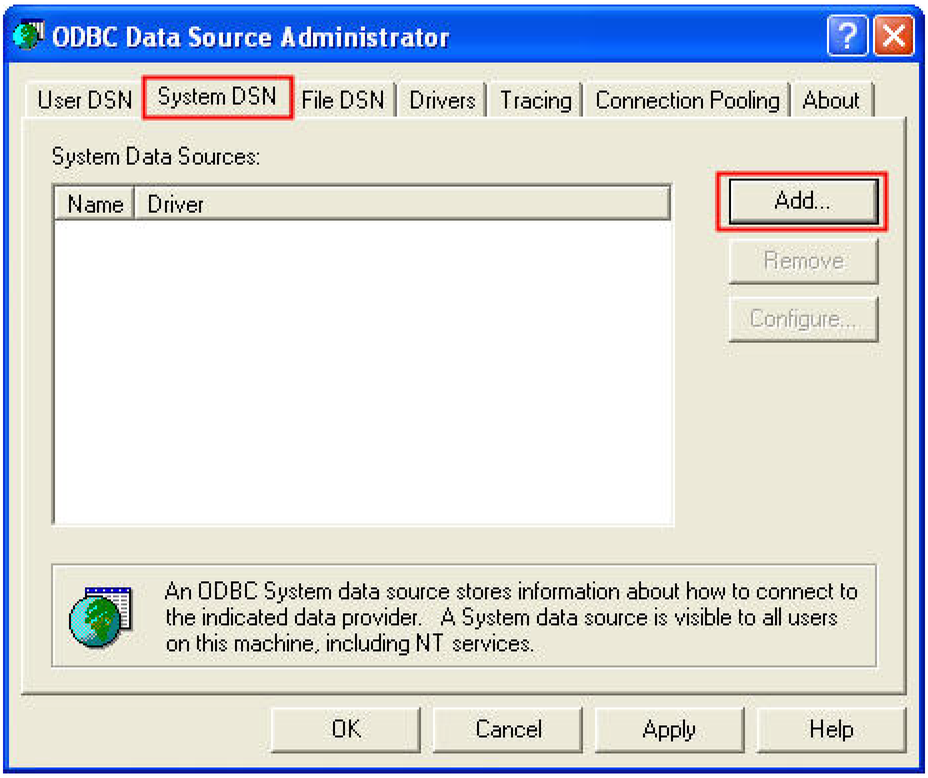
Control Panel
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
Address
Control Panel
Go
Control Panel
Switch to Category View
See Also
Windows Update
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Automatic Updates
BDE Administrator
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel® Graphics...
Internet Options
Keyboard

In the **Administrative Tools**, double-click **Data Sources (ODBC)**.



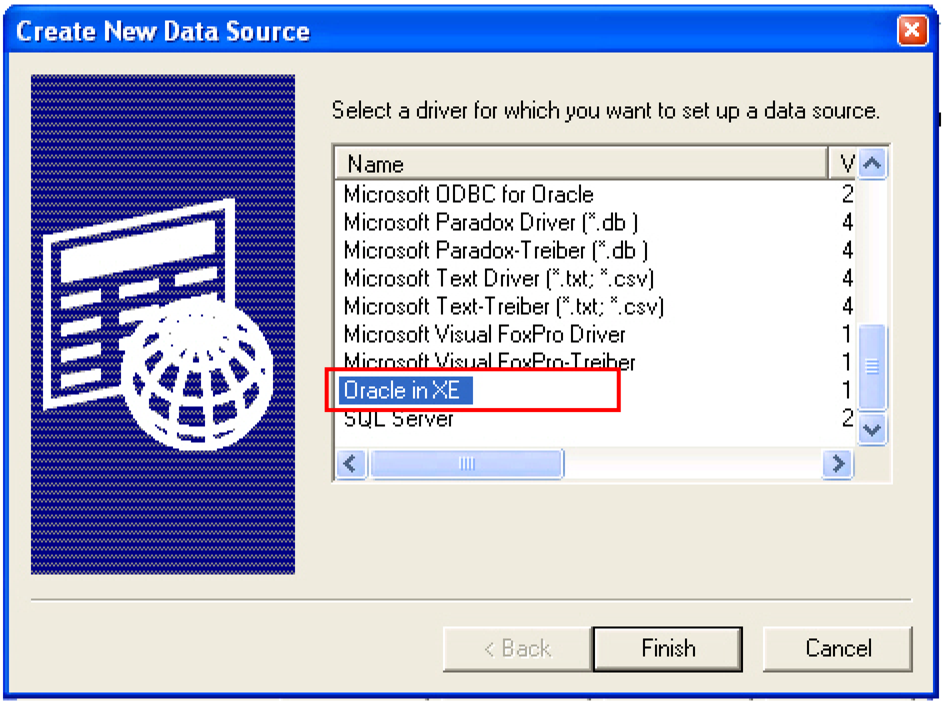
Administrative Tools
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
Address
Administrative Tools
Go
File and Folder Tasks
Share this folder
Other Places
Control Panel
My Documents
My Computer
Component Services
Shortcut
2 KB
Computer Management
Shortcut
2 KB
Data Sources (ODBC)
Shortcut
2 KB
Event Viewer
Shortcut
2 KB
Local Security Policy
Shortcut
2 KB
Performance
Shortcut
2 KB

In the **ODBC Data Source Administrator** dialog box, select **System DSN** tab and click on **Add** button to add system data source.


ODBC Data Source Administrator
User DSN
System DSN
File DSN
Drivers
Tracing
Connection Pooling
About
System Data Sources:
Name
Driver
Add...
Remove
Configure...
OK
Cancel
Apply
Help

An ODBC System data source stores information about how to connect to the indicated data provider. A System data source is visible to all users on this machine, including NT services.

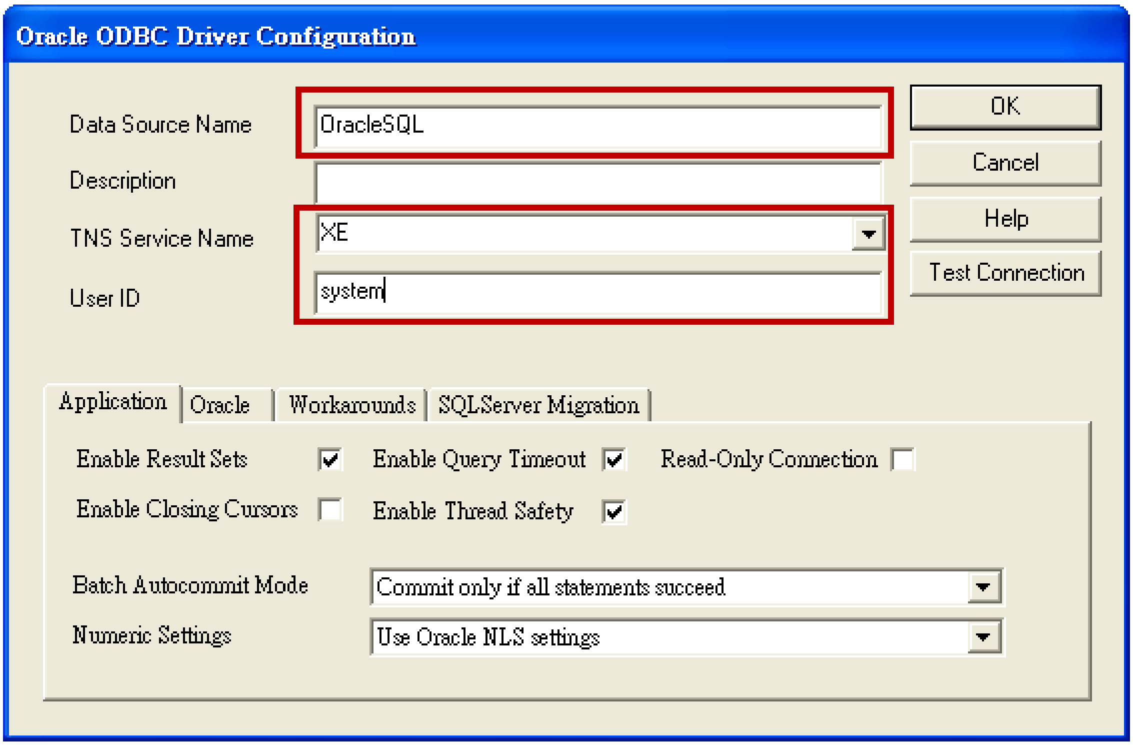
Select **Oracle in XE** and then click on **Finish** button.


Create New Data Source
< Back
Finish
Cancel

Select a driver for which you want to set up a data source.

Name	V
Microsoft ODBC for Oracle	2
Microsoft Paradox Driver (*.db)	4
Microsoft Paradox-Treiber (*.db)	4
Microsoft Text Driver (*.txt; *.csv)	4
Microsoft Text-Treiber (*.txt; *.csv)	4
Microsoft Visual FoxPro Driver	1
Microsoft Visual FoxPro-Treiber	1
Oracle in XE	1
SQL Server	2

Now complete Oracle ODBC Driver Configuration as mentioned in the below dialog.


Oracle ODBC Driver Configuration
OK
Cancel
Help
Test Connection
Application
Oracle
Workarounds
SQLServer Migration

Data Source Name: OracleSQL

Description:

TNS Service Name: XE

User ID: system

Enable Result Sets ☑ Enable Query Timeout ☑ Read-Only Connection ☐

Enable Closing Cursors ☐ Enable Thread Safety ☑

Batch Autocommit Mode: Commit only if all statements succeed

Numeric Settings: Use Oracle NLS settings

Data Source Name: Enter ODBC data source name or enter the name of the data source you want to access.

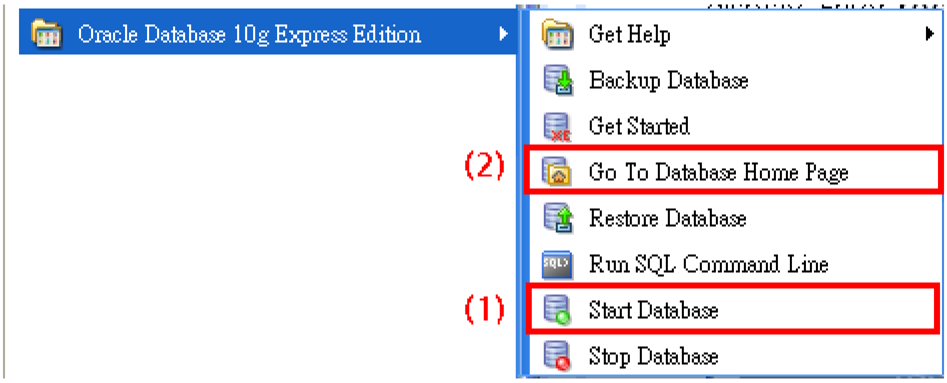
Description: Enter some text to identify the connection.

TNS Service Name: Must select **XE** in the TNS Service Name drop down list.

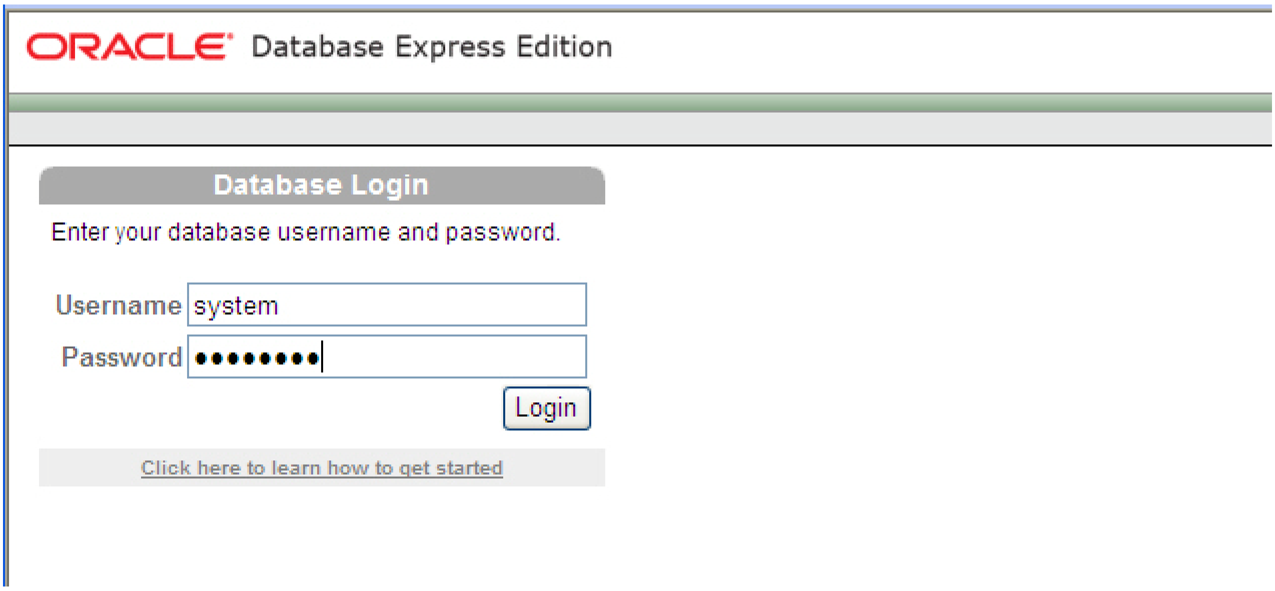
User ID: Enter user name **system** to use for this connection. This User ID is also the Username of Oracle database (see the figure below).

3. Create Database and Table

(1) Start Database (see the figure below)


Oracle Database 10g Express Edition
Get Help
Backup Database
Get Started
(2)
Go To Database Home Page
Restore Database
Run SQL Command Line
(1)
Start Database
Stop Database

(2) Go to Database homepage.


ORACLE Database Express Edition
Database Login

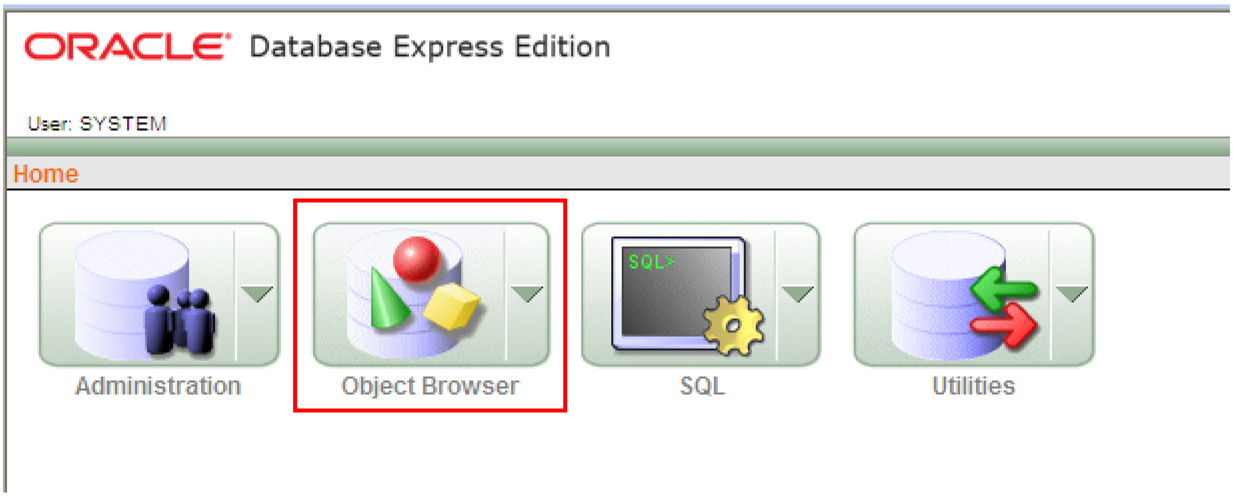
Enter your database username and password.

Username system

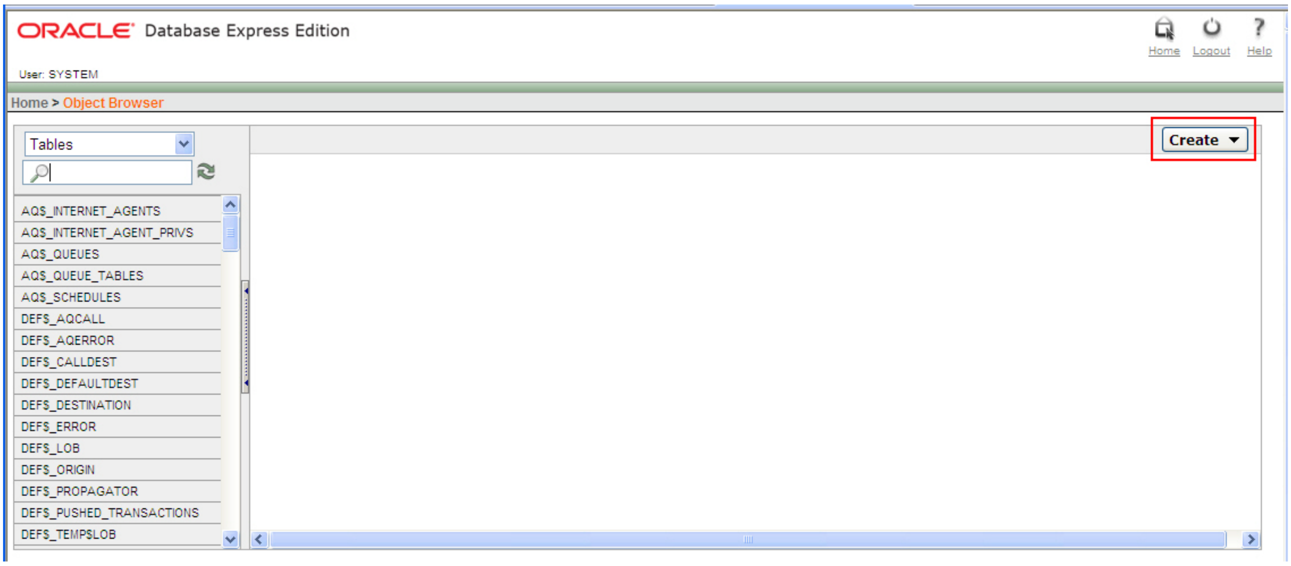
Password ●●●●●●●●●

Login
Click here to learn how to get started

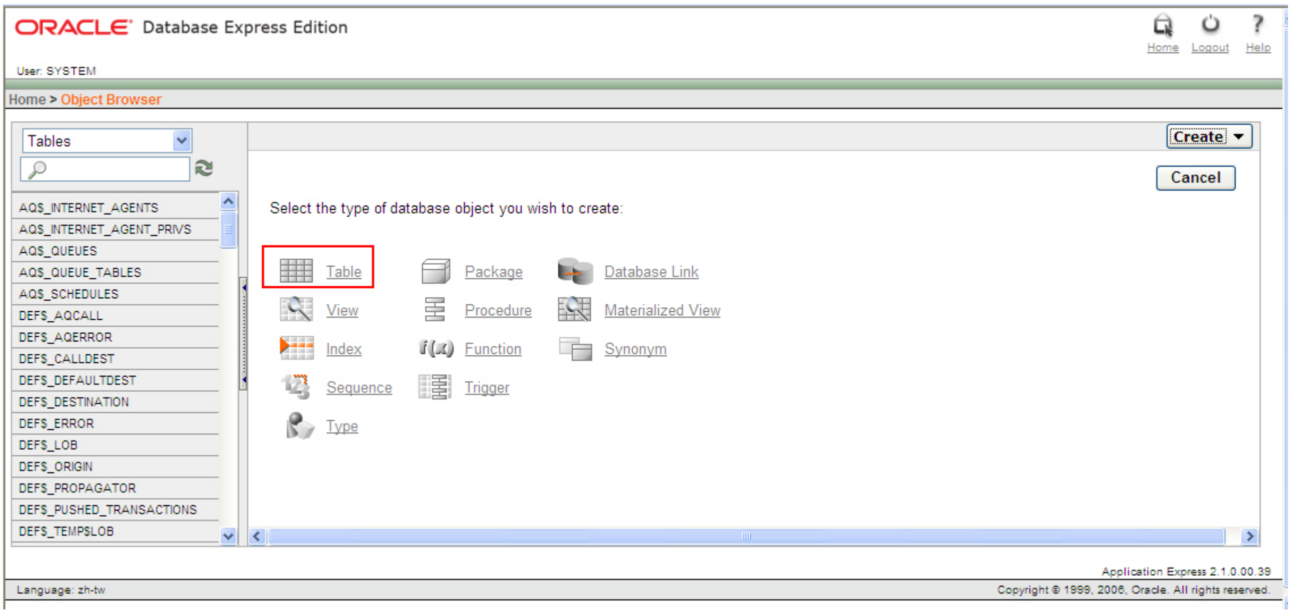
Enter username and password for the database and press **Login** button to enter into the database homepage. Then, select **Object Browser**.


ORACLE Database Express Edition
User: SYSTEM
Home
Administration
Object Browser
SQL
SQL
Utilities

Press **Create** button.


ORACLE Database Express Edition
Home
Logout
Help
User: SYSTEM
Home > Object Browser
Tables
Create
AQ$_INTERNET_AGENTS
AQ$_INTERNET_AGENT_PRIVS
AQ$_QUEUES
AQ$_QUEUE_TABLES
AQ$_SCHEDULES
DEF$_AQCALL
DEF$_AQERROR
DEF$_CALLDEST
DEF$_DEFAULTDEST
DEF$_DESTINATION
DEF$_ERROR
DEF$_LOB
DEF$_ORIGIN
DEF$_PROPAGATOR
DEF$_PUSHED_TRANSACTIONS
DEF$_TEMP$LOB

Click on **Table** link.


ORACLE Database Express Edition
Home
Logout
Help
User: SYSTEM
Home > Object Browser
Tables
Create
Cancel
AQ$_INTERNET_AGENTS
AQ$_INTERNET_AGENT_PRIVS
AQ$_QUEUES
AQ$_QUEUE_TABLES
AQ$_SCHEDULES
DEF$_AQCALL
DEF$_AQERROR
DEF$_CALLDEST
DEF$_DEFAULTDEST
DEF$_DESTINATION
DEF$_ERROR
DEF$_LOB
DEF$_ORIGIN
DEF$_PROPAGATOR
DEF$_PUSHED_TRANSACTIONS
DEF$_TEMP$LOB
Table
Package
Database Link
View
Procedure
Materialized View
Index
Function
Synonym
Sequence
Trigger
Type
Application Express 2.1.0.00.39
Language: zh-tw
Copyright © 1999, 2006, Oracle. All rights reserved.

Select the type of database object you wish to create:

Enter the name of the table. In this case, the name of the new table is entered as **oracletable**. Create three columns: TIME, DATA1 and DATA2 and select Type as CHAR (Character). Click on **Next** button for the next step.

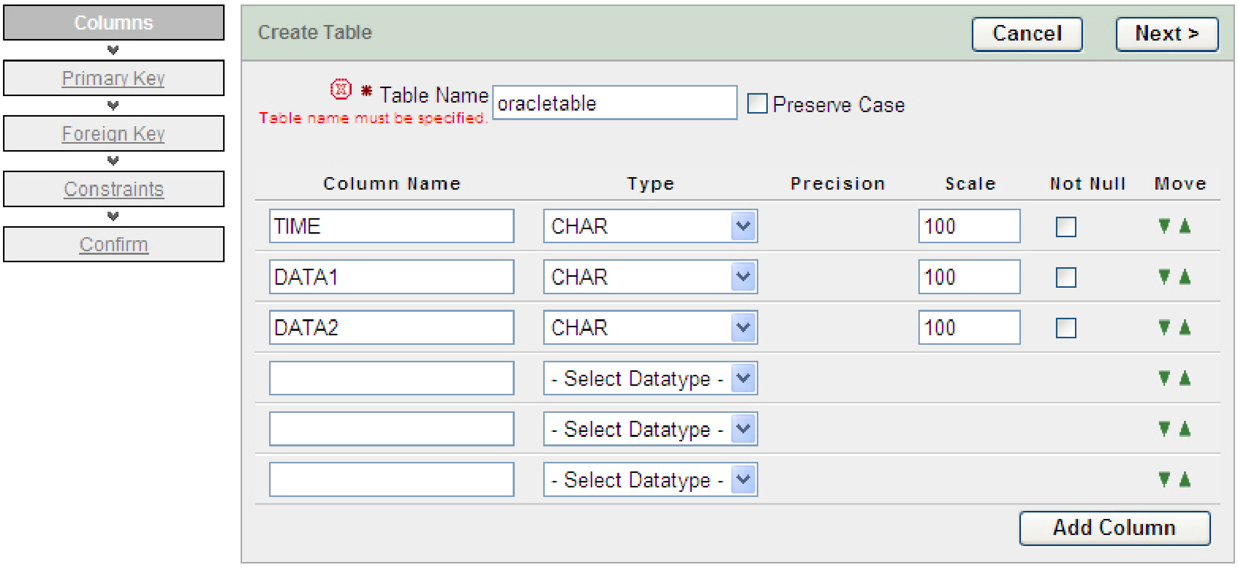

Columns
Primary Key
Foreign Key
Constraints
Confirm
Create Table
Cancel
Next >
Add Column

Table name must be specified.

* Table Name: oracletable ☐ Preserve Case

Column Name	Type	Precision	Scale	Not Null	Move
TIME	CHAR		100	☐	▼▲
DATA1	CHAR		100	☐	▼▲
DATA2	CHAR		100	☐	▼▲
	- Select Datatype -				▼▲
	- Select Datatype -				▼▲
	- Select Datatype -				▼▲

Select **No Primary Key**. Click on **Next** button for the next step.

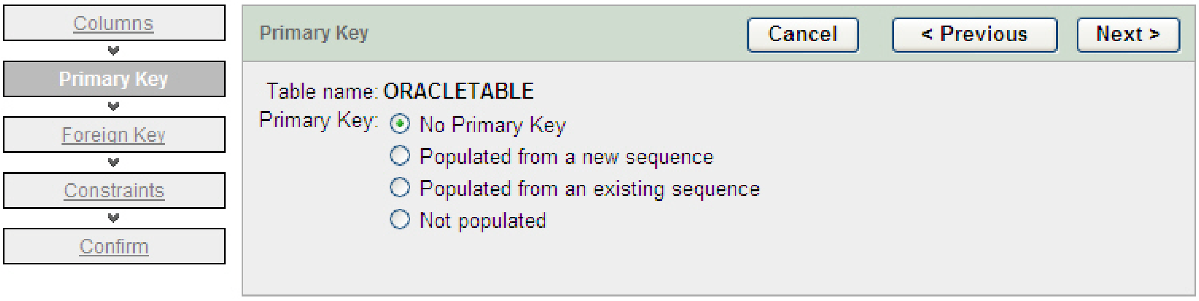
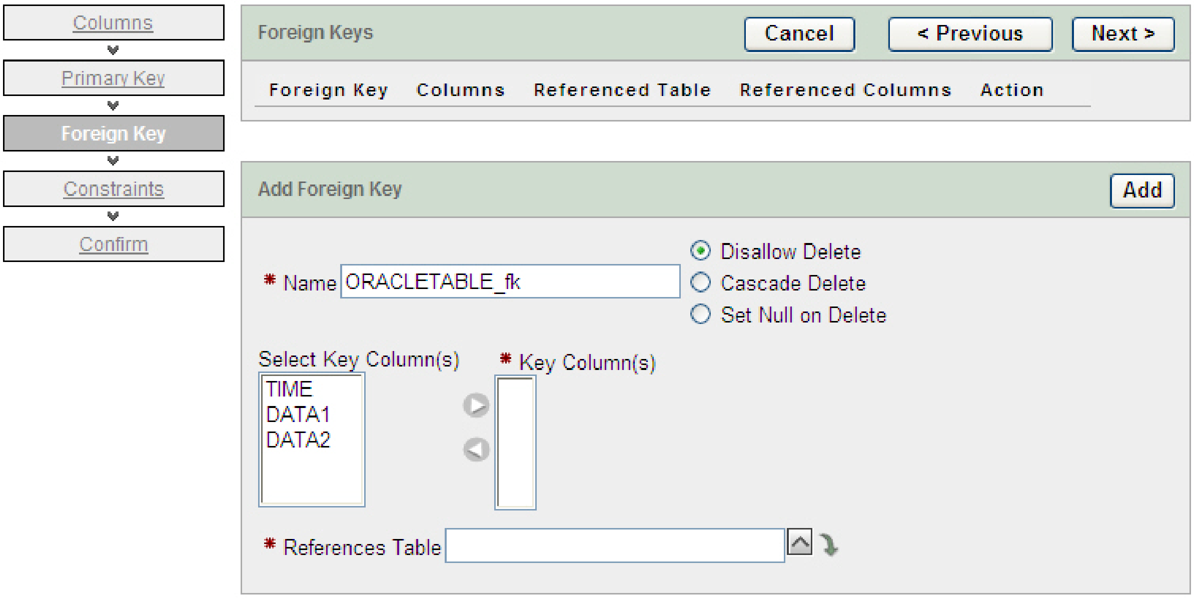

Columns
Primary Key
Foreign Key
Constraints
Confirm
Primary Key
Cancel
< Previous
Next >

Table name: ORACLETABLE

Primary Key:
- ● No Primary Key
- ○ Populated from a new sequence
- ○ Populated from an existing sequence
- ○ Not populated

Click on **Next** button for the next step.


Columns
Primary Key
Foreign Key
Constraints
Confirm
Foreign Keys
Cancel
< Previous
Next >
Foreign Key
Columns
Referenced Table
Referenced Columns
Action
Add Foreign Key
Add

* Name: ORACLETABLE_fk

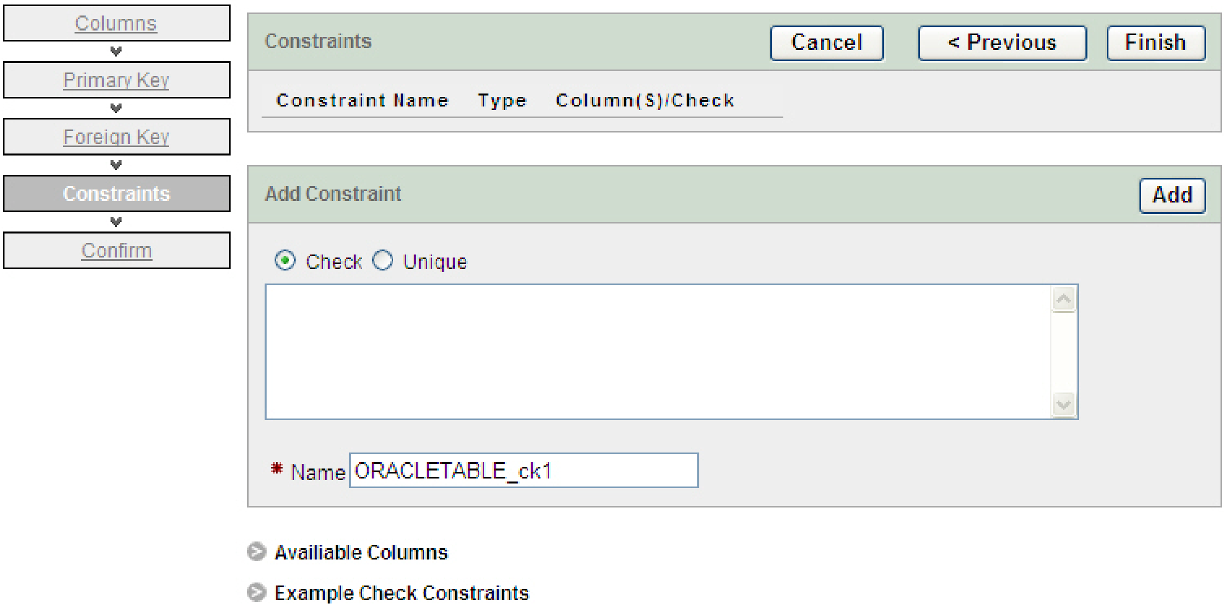
- ● Disallow Delete
- ○ Cascade Delete
- ○ Set Null on Delete

Select Key Column(s): TIME, DATA1, DATA2

* Key Column(s):

* References Table:

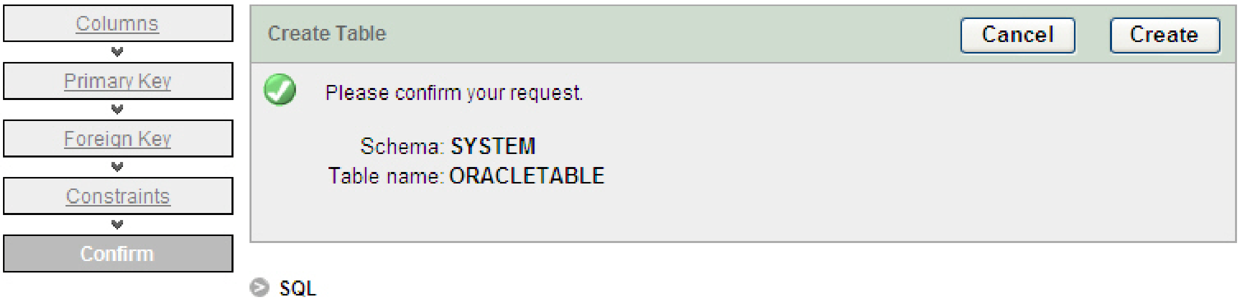
Click on **Finish** button to complete the settings.


Columns
Primary Key
Foreign Key
Constraints
Confirm
Constraints
Cancel
< Previous
Finish
Constraint Name
Type
Column(S)/Check
Add Constraint
Add
Availiable Columns
Example Check Constraints

● Check ○ Unique

* Name ORACLETABLE_ck1

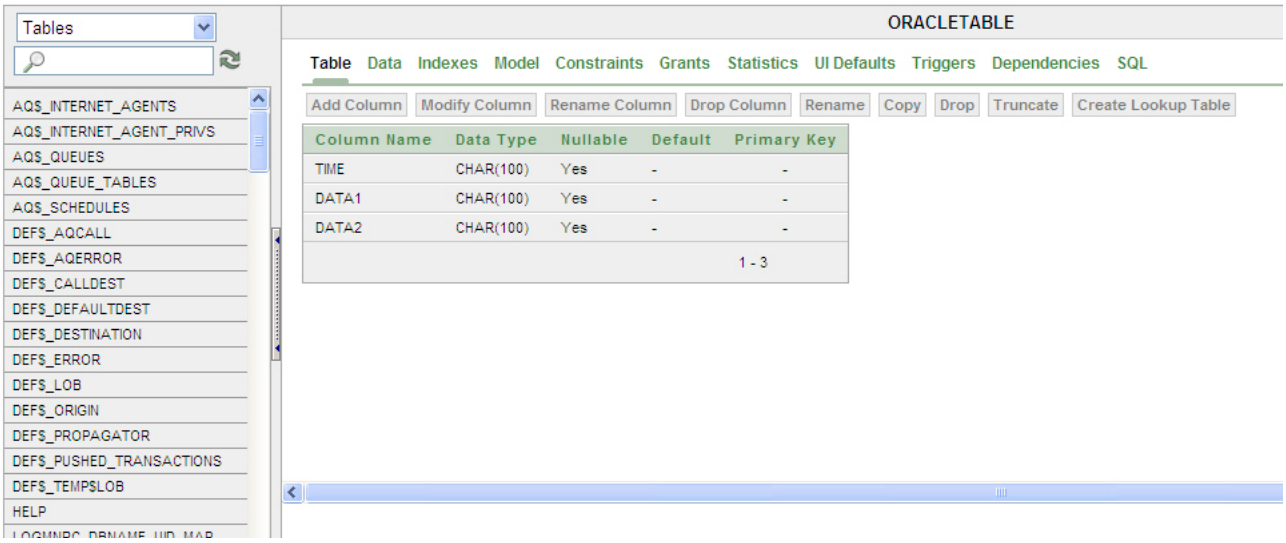
Click on **Create** button to create a new table.


Columns
Primary Key
Foreign Key
Constraints
Confirm
Create Table
Cancel
Create
SQL

Please confirm your request.

Schema: SYSTEM
Table name: ORACLETABLE

When the following figure shows on the screen, it indicates that a new table on Oracle database is created successfully.

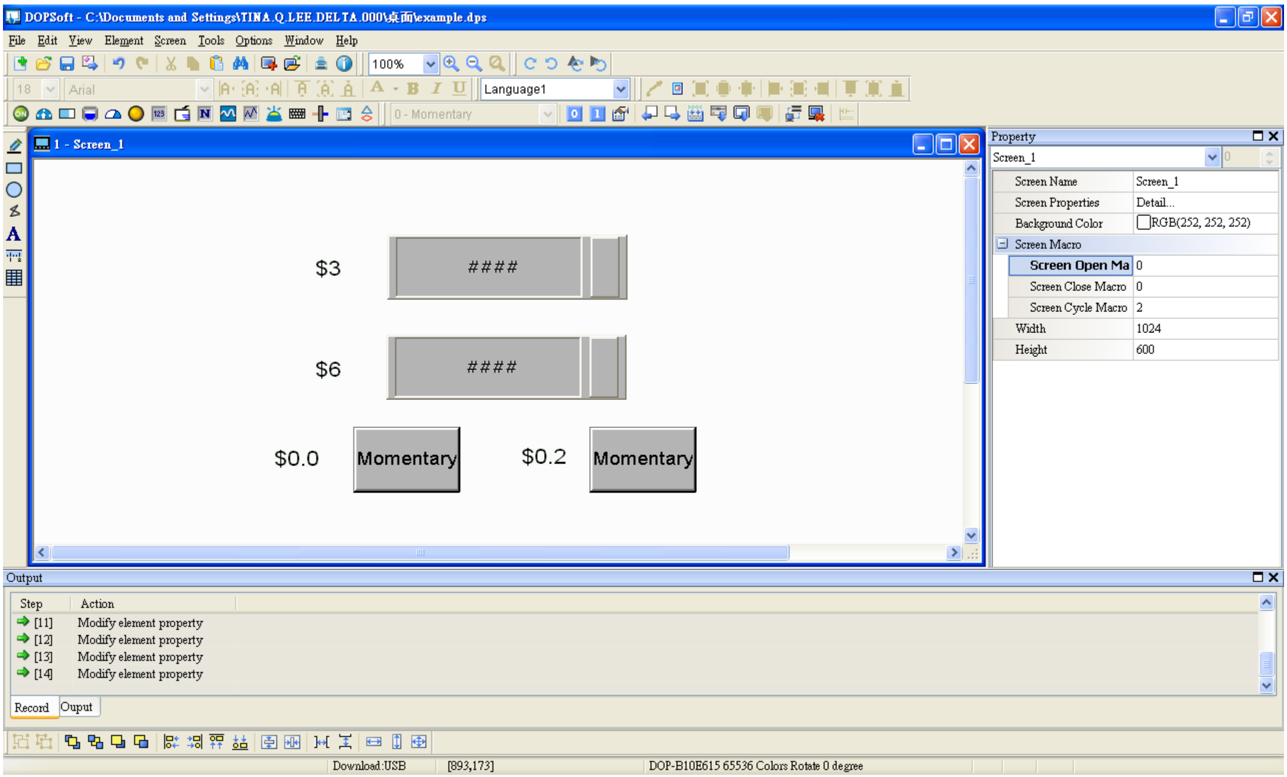

Tables
AQ$_INTERNET_AGENTS
AQ$_INTERNET_AGENT_PRIVS
AQ$_QUEUES
AQ$_QUEUE_TABLES
AQ$_SCHEDULES
DEF$_AQCALL
DEF$_AQERROR
DEF$_CALLDEST
DEF$_DEFAULTDEST
DEF$_DESTINATION
DEF$_ERROR
DEF$_LOB
DEF$_ORIGIN
DEF$_PROPAGATOR
DEF$_PUSHED_TRANSACTIONS
DEF$_TEMP$LOB
HELP
ORACLETABLE
Table
Data
Indexes
Model
Constraints
Grants
Statistics
UI Defaults
Triggers
Dependencies
SQL
Add Column
Modify Column
Rename Column
Drop Column
Rename
Copy
Drop
Truncate
Create Lookup Table

Column Name	Data Type	Nullable	Default	Primary Key
TIME	CHAR(100)	Yes	-	-
DATA1	CHAR(100)	Yes	-	-
DATA2	CHAR(100)	Yes	-	-

1 - 3

10.1.2 Create HMI Project File

Start DOPSoft software program and click **File > New** or click **New** icon to create a new project. Then, click **Element > Input > Numeric Entry** to create two numeric entry elements ($3 and $6) and click **Element > Button > Momentary** to create two maintained button elements ($0.0 and $0.2) on the screen. In this case, 10 inches color B10E615 type DOP series HMI is used.


DOPSoft - C:\Documents and Settings\TINA.Q.LEE.DELTA.000\桌面\example.dps
File Edit View Element Screen Tools Options Window Help
1 - Screen_1
$3
####
$6
####
$0.0
Momentary
$0.2
Momentary
Property
Output
Record
Ouput

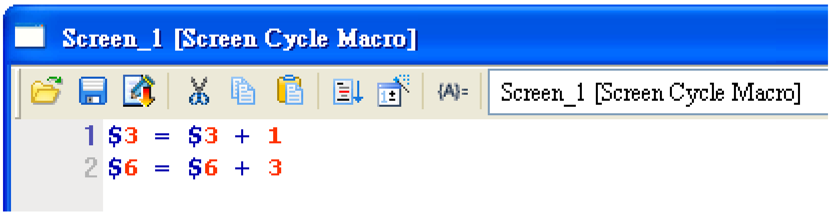
Screen_1

Screen Name	Screen_1
Screen Properties	Detail...
Background Color	RGB(252, 252, 252)
Screen Macro	
Screen Open Ma	0
Screen Close Macro	0
Screen Cycle Macro	2
Width	1024
Height	600

Step	Action
[11]	Modify element property
[12]	Modify element property
[13]	Modify element property
[14]	Modify element property

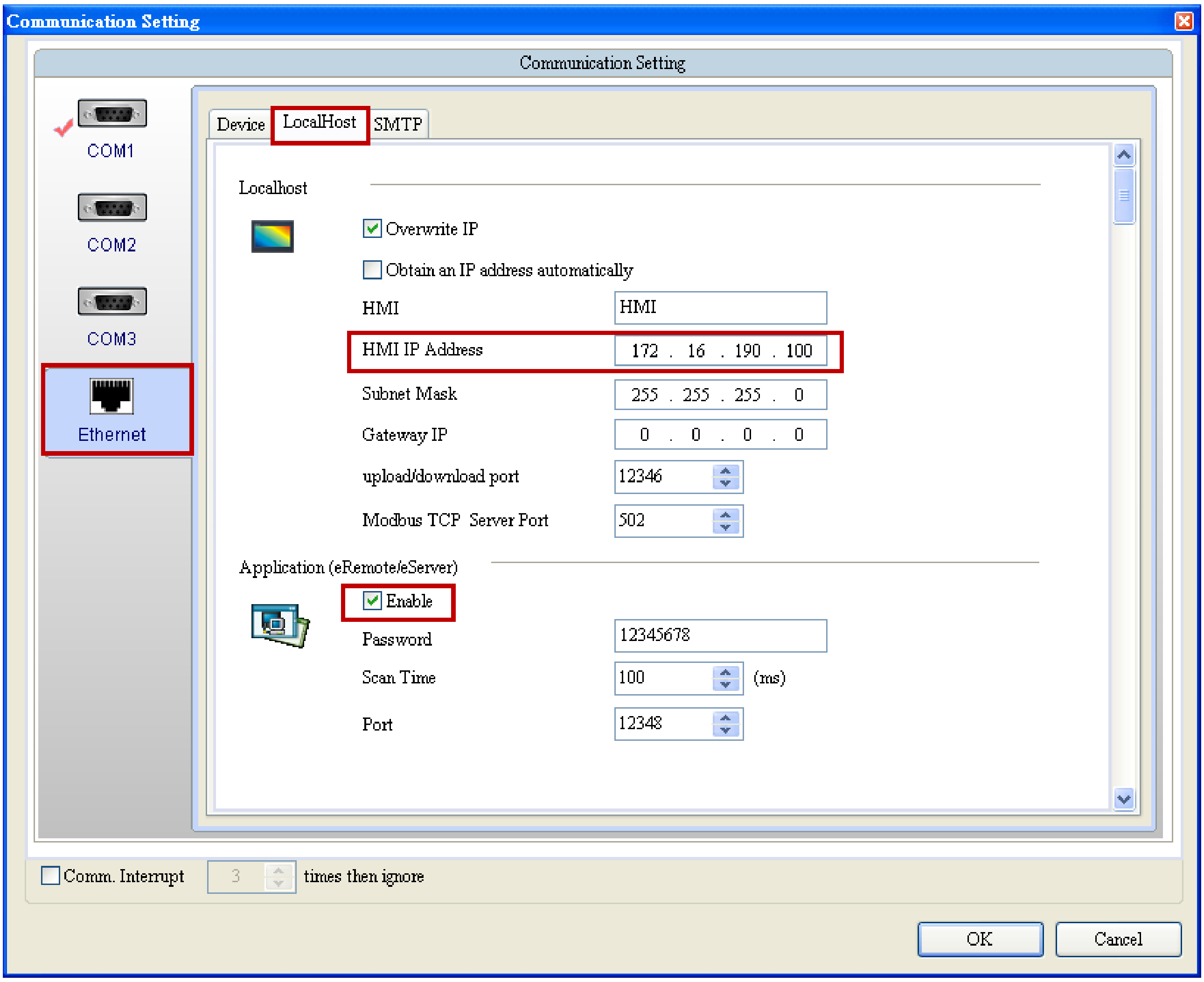
Download:USB [893,173] DOP-B10E615 65536 Colors Rotate 0 degree

Use Screen Cycle Macro and enter the following commands in macro command window.


Screen_1 [Screen Cycle Macro]
Screen_1 [Screen Cycle Macro]

```
$3 = $3 + 1
$6 = $6 + 3
```

Click **Options > Communication Setting > Ethernet > LocalHost,** set HMI IP Address and check the Application(eRemote / eServer) function **Enable.** Then, press **OK** button to finish the settings.



Communication Setting
COM1
COM2
COM3
Ethernet
Device
LocalHost
SMTP

Localhost

☑ Overwrite IP

☐ Obtain an IP address automatically

HMI: HMI

HMI IP Address: 172 . 16 . 190 . 100

Subnet Mask: 255 . 255 . 255 . 0

Gateway IP: 0 . 0 . 0 . 0

upload/download port: 12346

Modbus TCP Server Port: 502

Application (eRemote/eServer)

☑ Enable

Password: 12345678

Scan Time: 100 (ms)

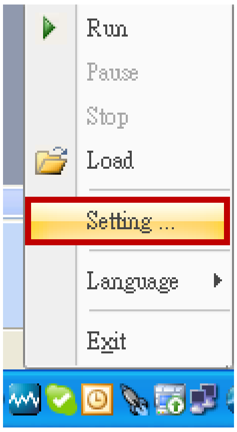
Port: 12348

☐ Comm. Interrupt 3 times then ignore

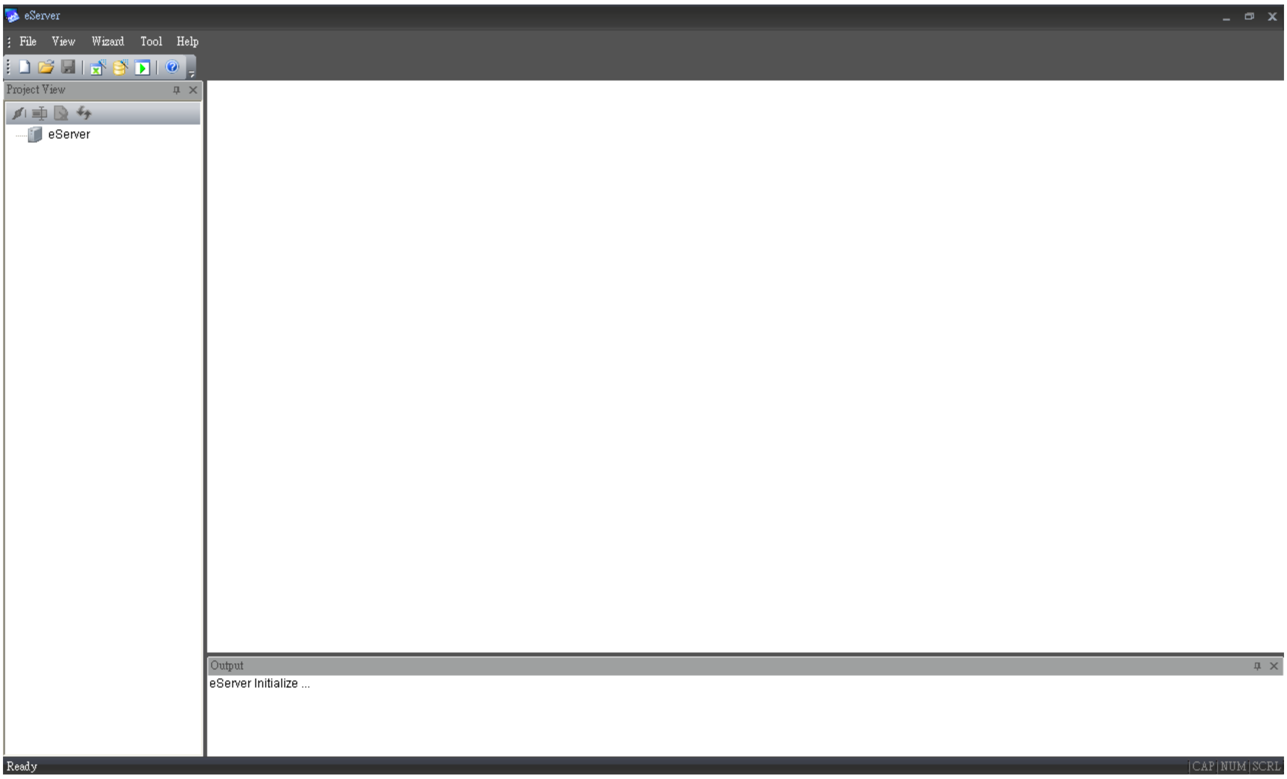
OK
Cancel

10.1.3 eServer Setting

1. After eServer is enabled, eServer icon will appear at the bottom right of Windows screen.
   Right-click this icon and select **Setting** option from the pop-up menu.

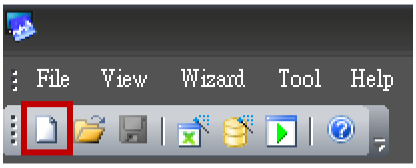

Run
Pause
Stop
Load
Setting ...
Language
Exit

2. Then, open eServer window.

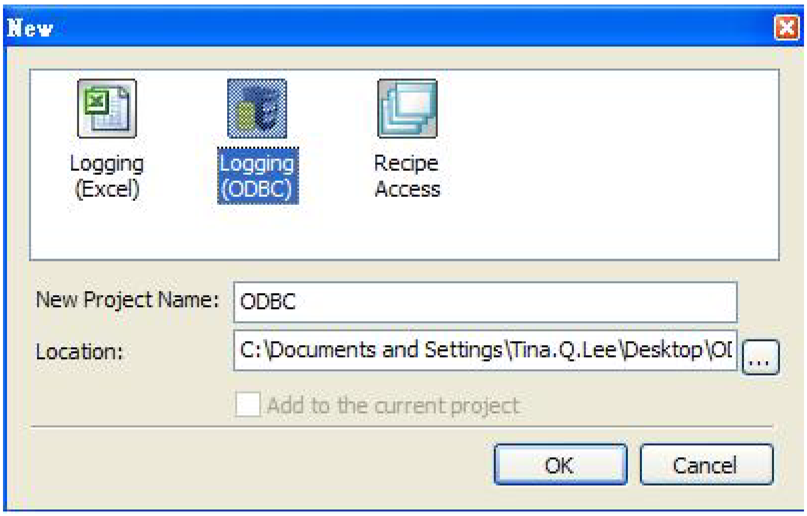

eServer
File
View
Wizard
Tool
Help
Project View
eServer
Output
Ready
CAP
NUM
SCRL

eServer Initialize ...

3. Click **File > New** or click icon to create a new project file.


File
View
Wizard
Tool
Help

4. Select icon to enable ODBC Logging Wizard.



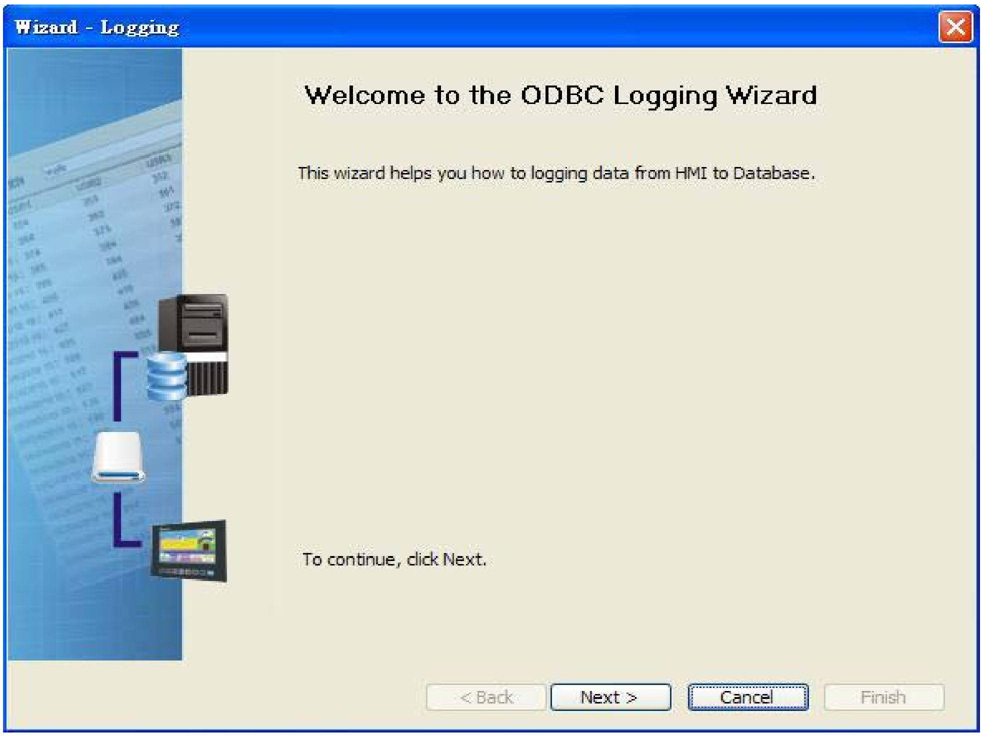
New
Logging (Excel)
Logging (ODBC)
Recipe Access

New Project Name: ODBC

Location: C:\Documents and Settings\Tina.Q.Lee\Desktop\OI

☐ Add to the current project

OK
Cancel



Wizard - Logging

Welcome to the ODBC Logging Wizard

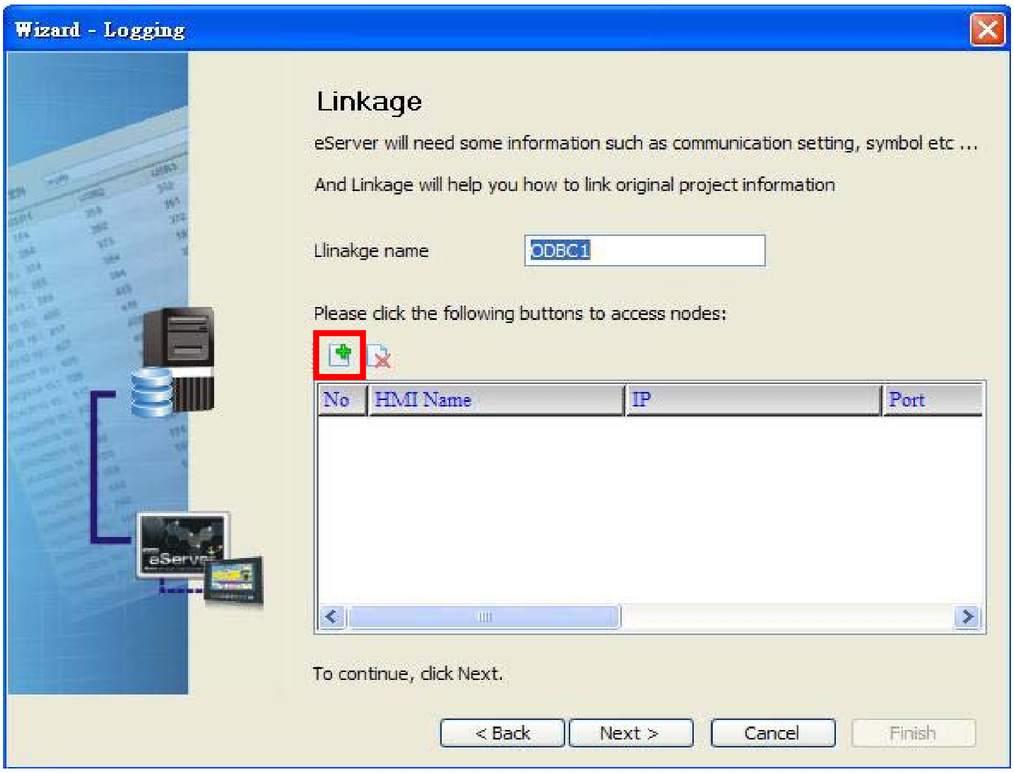
This wizard helps you how to logging data from HMI to Database.

To continue, click Next.

< Back
Next >
Cancel
Finish

Press **Next** button to go to next step.

5. Click **New** icon to access nodes (link to HMI).



Wizard - Logging

Linkage

eServer will need some information such as communication setting, symbol etc ...

And Linkage will help you how to link original project information

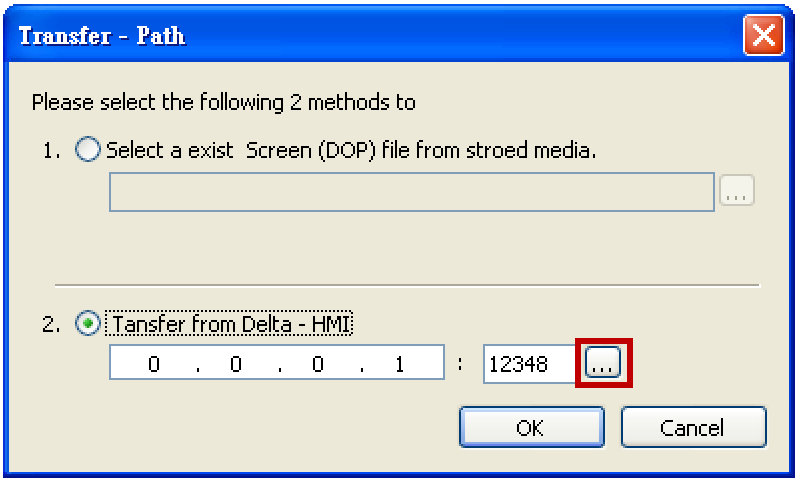
Llinakge name: ODBC1

Please click the following buttons to access nodes:

No	HMI Name	IP	Port

To continue, click Next.

Choose **Transfer from Delta – HMI** option to transfer the HMI screen project file via network communication directly.



Transfer - Path

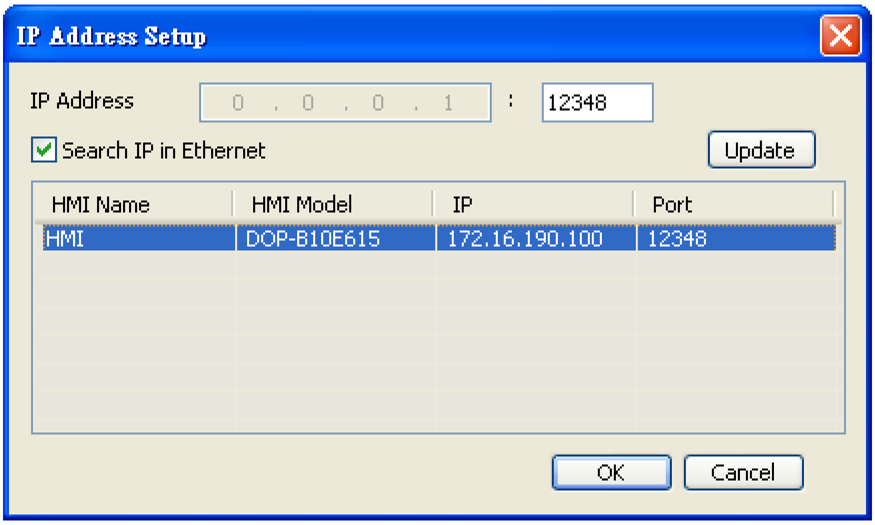
Please select the following 2 methods to

1. ○ Select a exist Screen (DOP) file from stroed media.

2. ● Tansfer from Delta - HMI

0 . 0 . 0 . 1 : 12348

After searching HMI IP in Ethernet, select HMI Name is HMI, IP is 172.16.190.100, press **OK**.

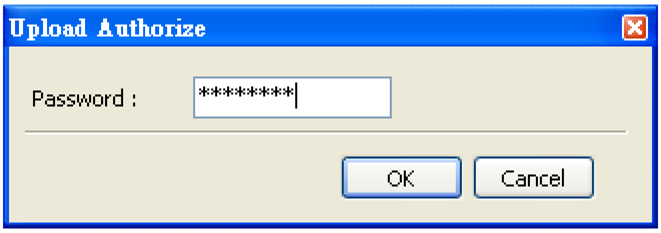

IP Address Setup
Update
OK
Cancel

IP Address 0 . 0 . 0 . 1 : 12348

☑ Search IP in Ethernet

HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348

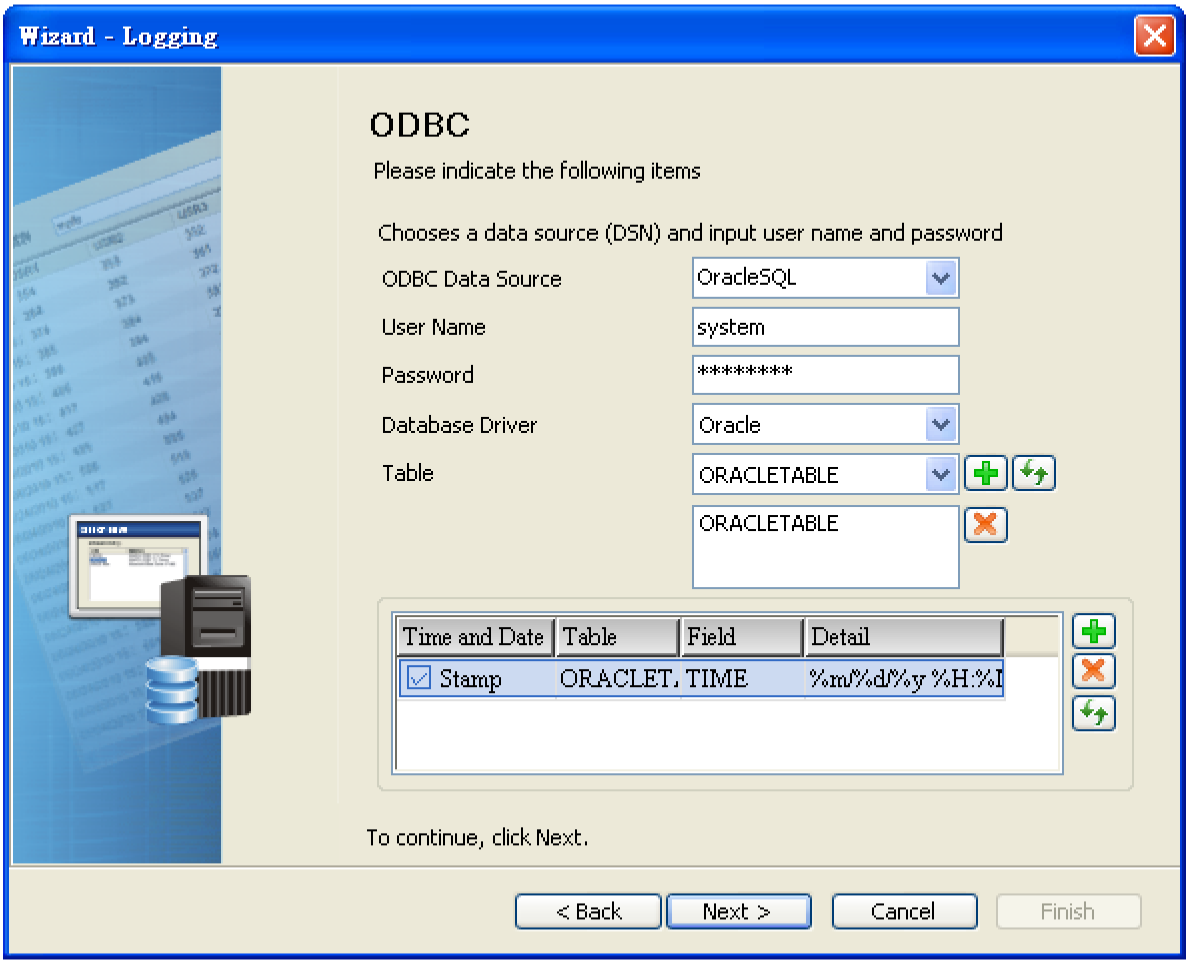
eServer will ask user to input the authorize password to connected with HMI. (The default password is 12345678.)


Upload Authorize
OK
Cancel

Password : ********

Press **OK** button to go to next step.

6. ODBC Data Source Setting: Create an ODBC Data Source pointing to your database. Please refer to the following settings and press refresh button to select table.



ODBC

Please indicate the following items

Chooses a data source (DSN) and input user name and password

ODBC Data Source: OracleSQL

User Name: system

Password: ********

Database Driver: Oracle

Table: ORACLETABLE

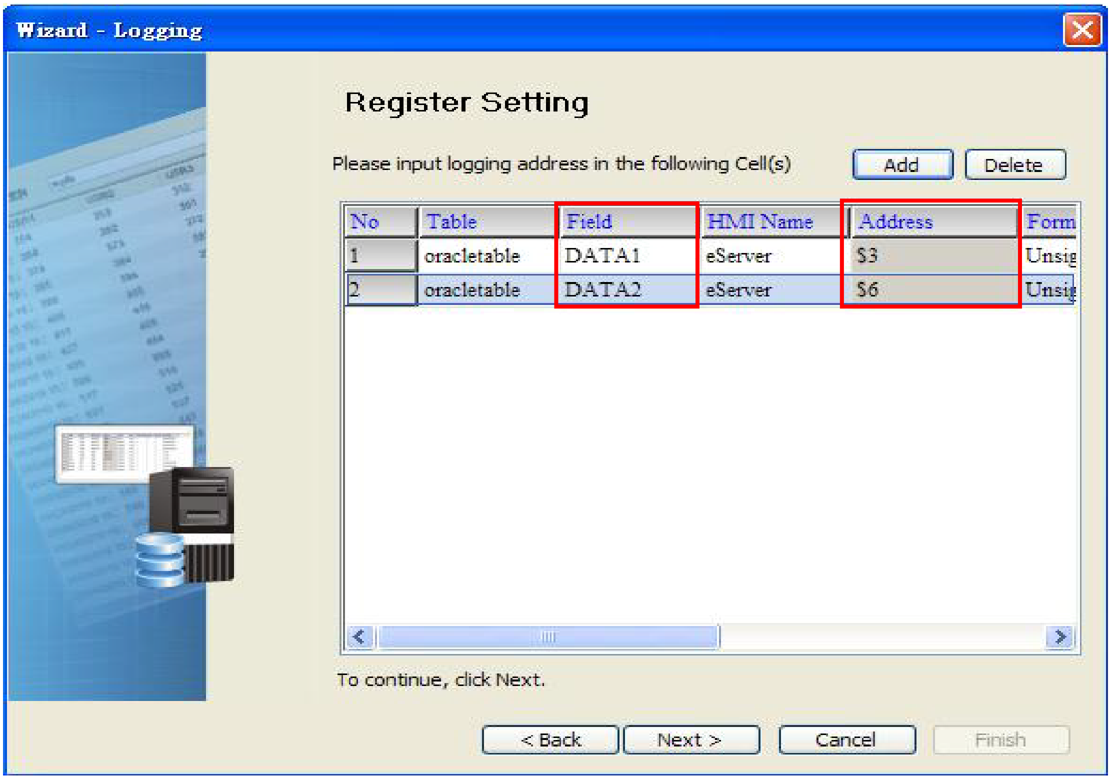
ORACLETABLE

Time and Date	Table	Field	Detail
☑ Stamp	ORACLET.	TIME	%m/%d/%y %H:%I

To continue, click Next.

Press **Next** button to go to next step.

7. Register Setting: Set the register address of the sampling data.


Wizard - Logging
Add
Delete
< Back
Next >
Cancel
Finish

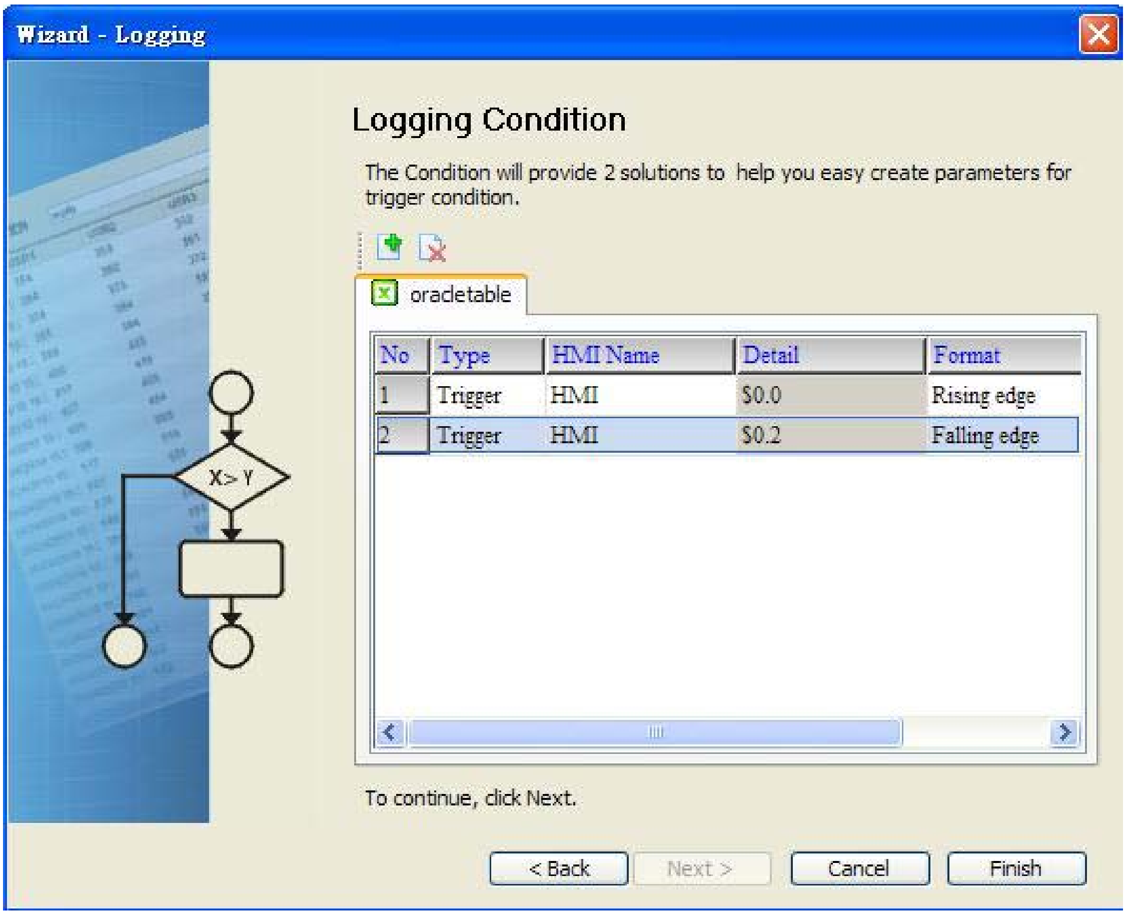
Register Setting

Please input logging address in the following Cell(s)

No	Table	Field	HMI Name	Address	Form
1	oracletable	DATA1	eServer	$3	Unsig
2	oracletable	DATA2	eServer	$6	Unsig

To continue, click Next.

8. Select the Type as **Trigger**. Then, set the format of address $0.0 to **Rising edge** and the format of address $0.2 to **Falling edge** respectively. Press **Finish** button to continue.


Wizard - Logging
X> Y
< Back
Next >
Cancel
Finish

Logging Condition

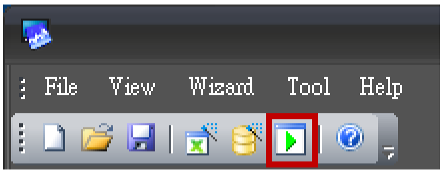
The Condition will provide 2 solutions to help you easy create parameters for trigger condition.

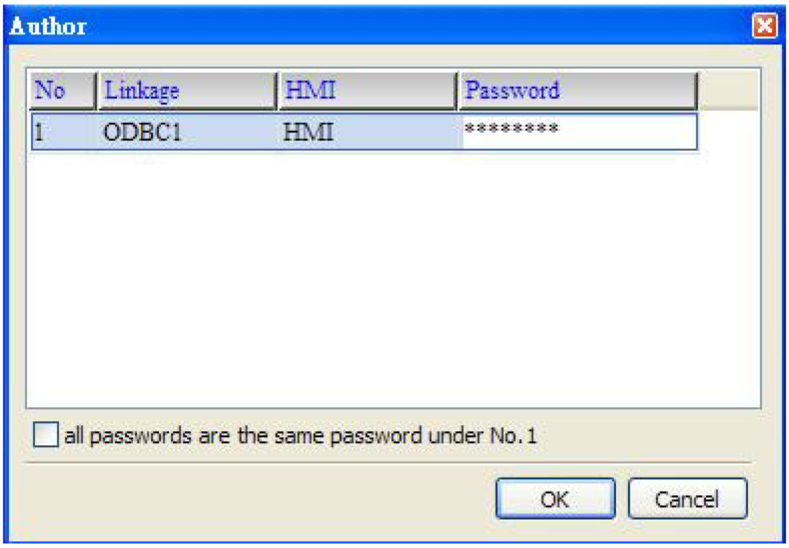
oracletable

No	Type	HMI Name	Detail	Format
1	Trigger	HMI	$0.0	Rising edge
2	Trigger	HMI	$0.2	Falling edge

To continue, click Next.

10. Press ▶ icon. After the password is entered, the system will start sampling operation, i.e. writing data in MySQL Server.


File
View
Wizard
Tool
Help

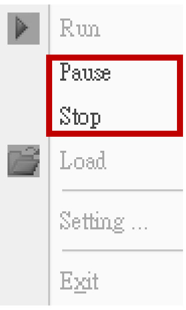

Author

No	Linkage	HMI	Password
1	ODBC1	HMI	********

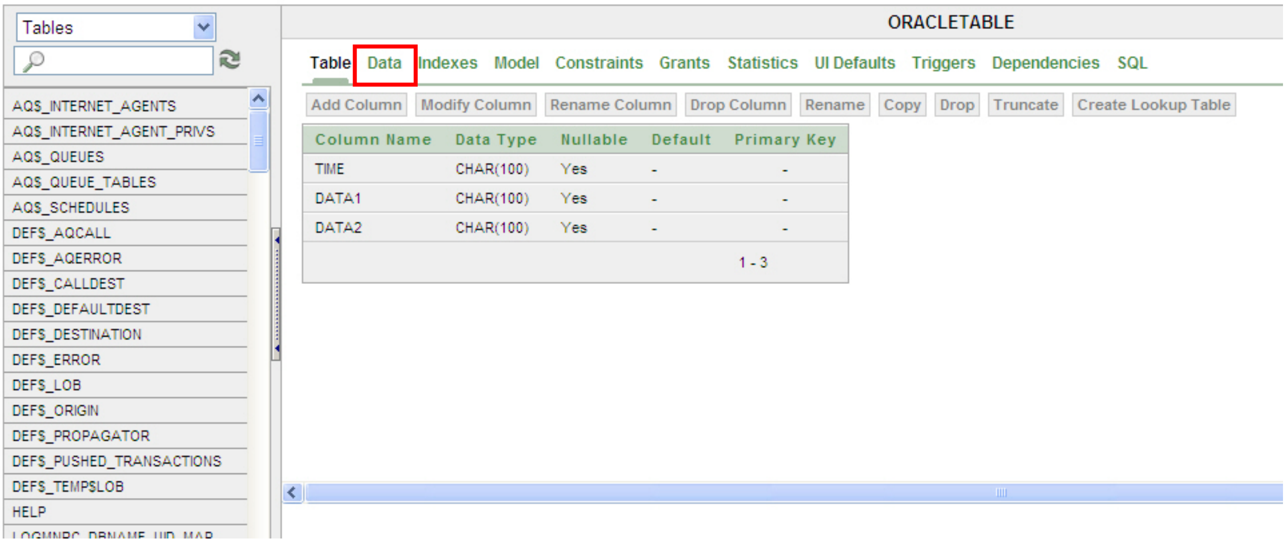
☐ all passwords are the same password under No.1

OK
Cancel

10. If the users want to pause or stop the sampling operation, only right-click eServer icon at the bottom right of Windows screen and select Pause or Stop option from the pop-up menu, the sampling operation will pause and stop immediately.


Run
Pause
Stop
Load
Setting ...
Exit

11. Open the browser and go back to the Oracle database. Click on **Data** link.


Tables
AQ$_INTERNET_AGENTS
AQ$_INTERNET_AGENT_PRIVS
AQ$_QUEUES
AQ$_QUEUE_TABLES
AQ$_SCHEDULES
DEF$_AQCALL
DEF$_AQERROR
DEF$_CALLDEST
DEF$_DEFAULTDEST
DEF$_DESTINATION
DEF$_ERROR
DEF$_LOB
DEF$_ORIGIN
DEF$_PROPAGATOR
DEF$_PUSHED_TRANSACTIONS
DEF$_TEMP$LOB
HELP
Table
Data
Indexes
Model
Constraints
Grants
Statistics
UI Defaults
Triggers
Dependencies
SQL
Add Column
Modify Column
Rename Column
Drop Column
Rename
Copy
Drop
Truncate
Create Lookup Table

ORACLETABLE

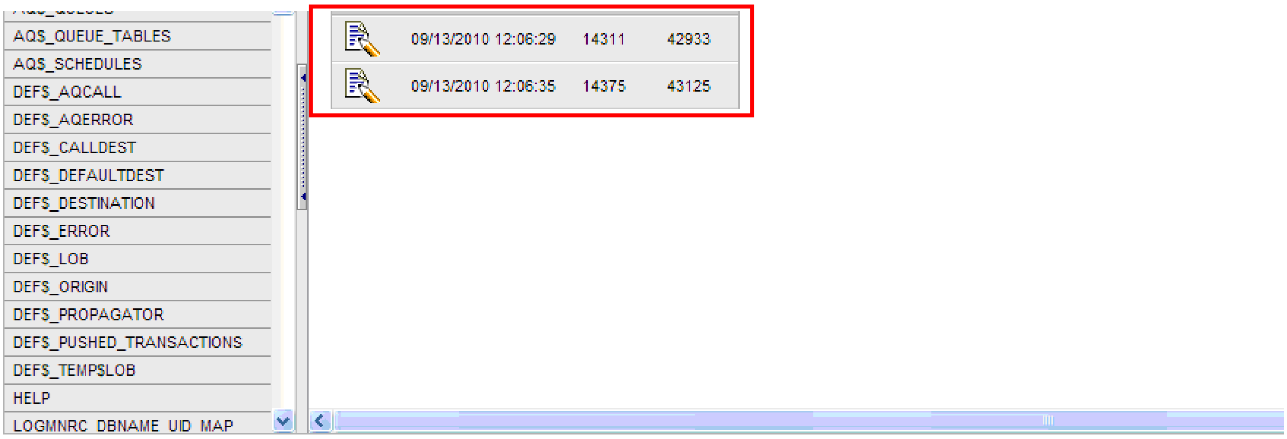
Column Name	Data Type	Nullable	Default	Primary Key
TIME	CHAR(100)	Yes	-	-
DATA1	CHAR(100)	Yes	-	-
DATA2	CHAR(100)	Yes	-	-

1 - 3

There are two recorded data shown on the screen.

When **Rising Edge** button ($0.0) on HMI screen is pressed, the writing operation will be triggered and the system will write the first data into the database.

When **Falling Edge** button ($0.2) on HMI screen is pressed, the writing operation will be triggered and the system will write the second data into the database.


AQ$_QUEUE_TABLES
AQ$_SCHEDULES
DEF$_AQCALL
DEF$_AQERROR
DEF$_CALLDEST
DEF$_DEFAULTDEST
DEF$_DESTINATION
DEF$_ERROR
DEF$_LOB
DEF$_ORIGIN
DEF$_PROPAGATOR
DEF$_PUSHED_TRANSACTIONS
DEF$_TEMP$LOB
HELP
LOGMNRC_DBNAME_UID_MAP

09/13/2010 12:06:29	14311	42933
09/13/2010 12:06:35	14375	43125

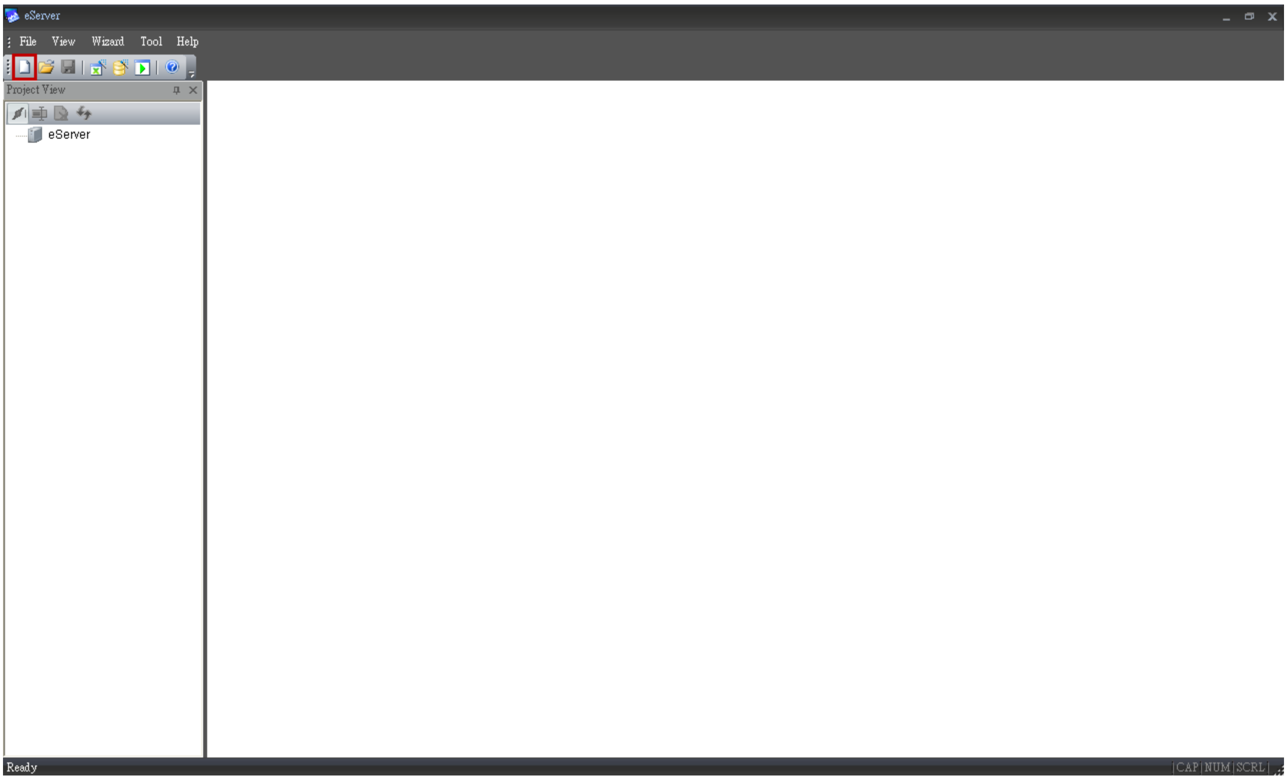
Chapter 11 Recipe Access Setting

11.1 Detailed Settings

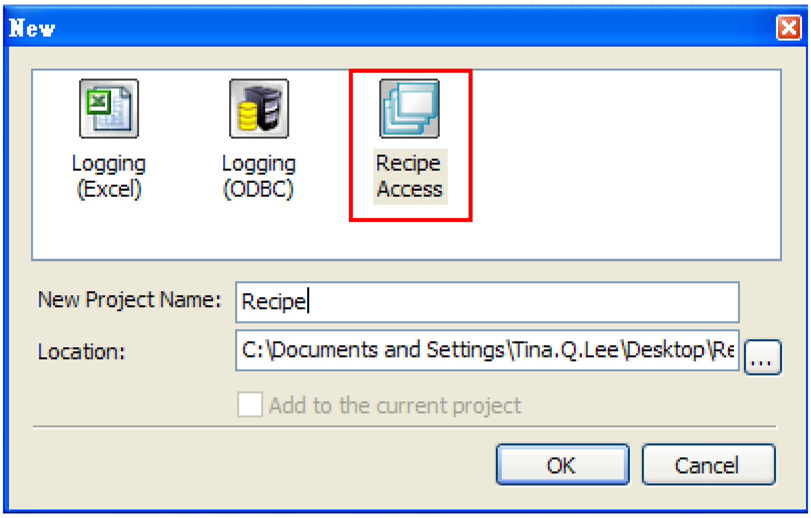
Please refer to the following steps to complete Excel sampling setting, i.e. how to log data from HMI to Excel.

11.1.1 New Project

Start eServer, and click **File > New** or click **New** icon


eServer
File
View
Wizard
Tool
Help
Project View
eServer
Ready
CAP
NUM
SCRL

After the **New** dialog box is opened, select **Recipe Access** icon and press **OK** button.


New
Logging (Excel)
Logging (ODBC)
Recipe Access
...
OK
Cancel

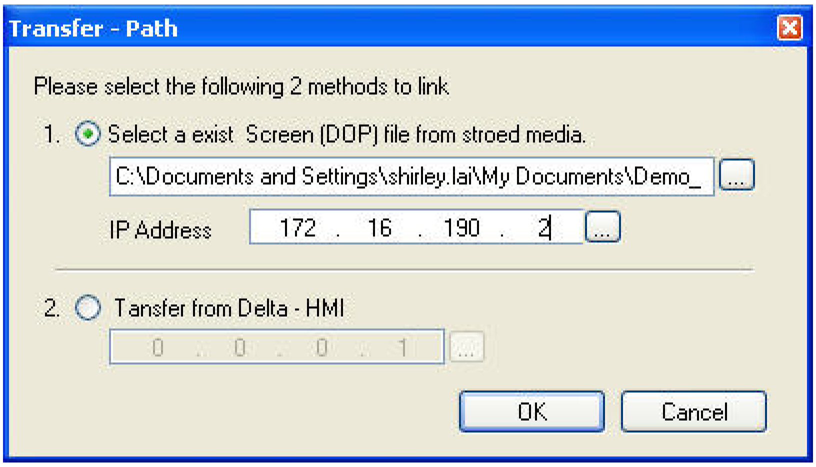
New Project Name: Recipe

Location: C:\Documents and Settings\Tina.Q.Lee\Desktop\Re

☐ Add to the current project

Click icon to link HMI screen project file. There are two methods available for selection:

1. Select an existing Screen (DOP) file from stored media: Open an existing screen project file and set the IP address of the connecting HMI.



Transfer - Path

Please select the following 2 methods to link

1. ● Select a exist Screen (DOP) file from stroed media.

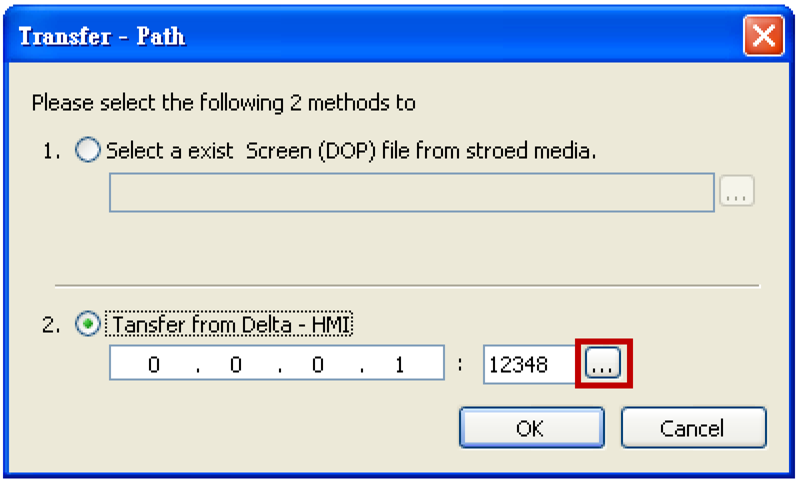
C:\Documents and Settings\shirley.lai\My Documents\Demo_

IP Address 172 . 16 . 190 . 2

2. ○ Tansfer from Delta - HMI

0 . 0 . 0 . 1

2. Transfer from Delta – HMI: Transfer the HMI screen project file via network communication directly.



Transfer - Path

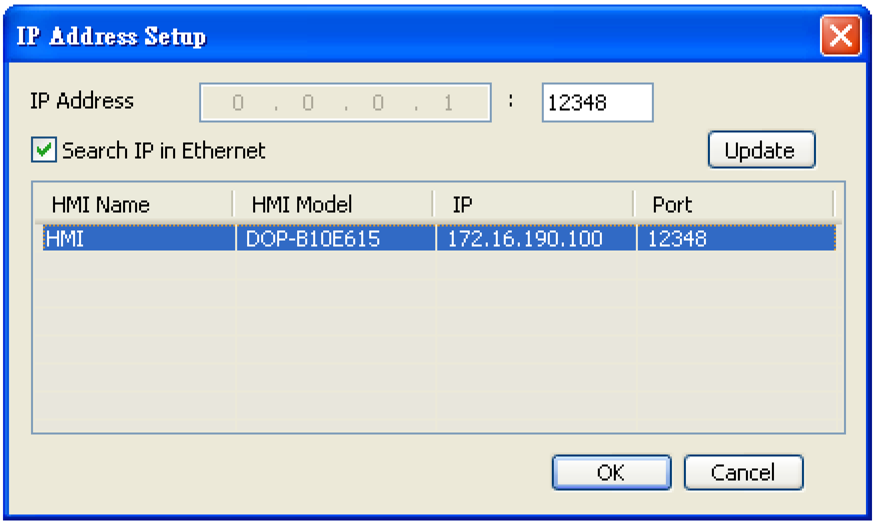
Please select the following 2 methods to

1. ○ Select a exist Screen (DOP) file from stroed media.

2. ● Tansfer from Delta - HMI

0 . 0 . 0 . 1 : 12348

After searching HMI IP in Ethernet, select HMI Name is HMI, IP is 172.16.190.100, press **OK**.



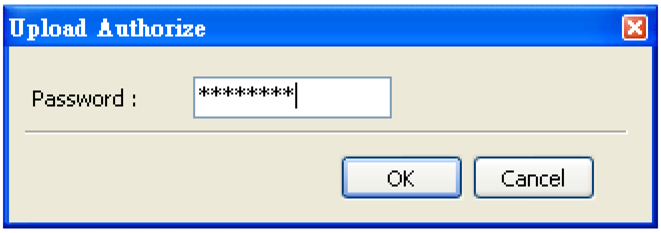
IP Address Setup
IP Address
0 . 0 . 0 . 1
:
Update
OK
Cancel

12348

☑ Search IP in Ethernet

HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348

eServer will ask user to input the authorize password to connected with HMI. (The default password is 12345678.)



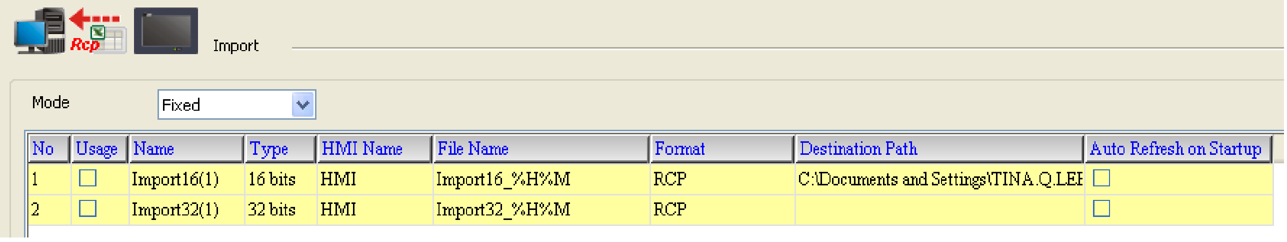
Upload Authorize
OK
Cancel

Password : ********

11.1.2 Register Setting

This step is used to set the register addresses of the database. There are two modes, Import and Export available for selection. After selecting the desired mode, choose Fixed or Variance from the drop-down list and complete the settings.

Import - Fixed

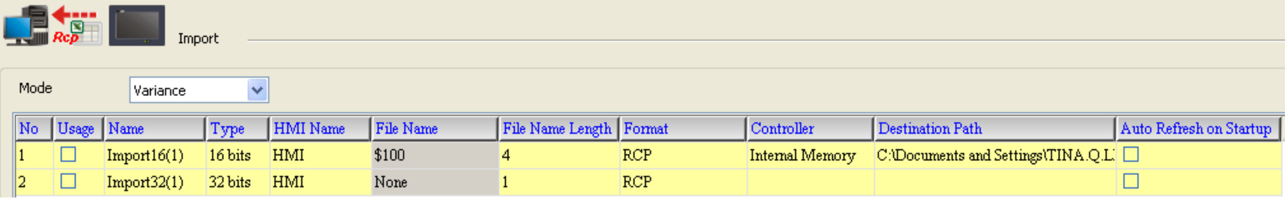


Import

Mode: Fixed

No	Usage	Name	Type	HMI Name	File Name	Format	Destination Path	Auto Refresh on Startup
1	☐	Import16(1)	16 bits	HMI	Import16_%H%M	RCP	C:\Documents and Settings\TINA.Q.LEE	☐
2	☐	Import32(1)	32 bits	HMI	Import32_%H%M	RCP		☐

Import - Variance



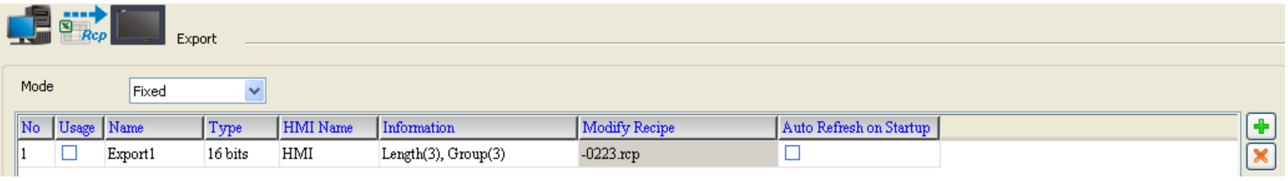
Import

Mode: Variance

No	Usage	Name	Type	HMI Name	File Name	File Name Length	Format	Controller	Destination Path	Auto Refresh on Startup
1	☐	Import16(1)	16 bits	HMI	$100	4	RCP	Internal Memory	C:\Documents and Settings\TINA.Q.L	☐
2	☐	Import32(1)	32 bits	HMI	None	1	RCP			☐

Setting Item	Description	Remark
No.	Excel Sheet index which the sampling data will be written.	Unchangeable
Usage	If the users want to select 16-bit recipe, enable this option by checking the check box.	
Name	Recipe display name	
Type	Recipe Bit type	Unchangeable
HMI Name	Name of connecting HMI	Unchangeable
File Name	1. When Fixed is selected: It is the file name of the imported file which could be changed and user-defined. 2. When Variance is selected: It is the register address of a certain trigger element. Note: The register only could be set to Word.	
Format	Provide user could save recipe as RCP and CSV file.	
File Name Length	Number of characters by referring the user-defined file name.	
Controller	Connecting controller	Unchangeable
Destination Path	Destination location where the imported file is located.	
Auto Refresh on Startup	Auto Refresh on Startup function for user could select when execute recipe at first. No matter what the condition set to Trigger or Const, if check auto refresh on start up function then eServer will execute Import or Export recipe at first time.	

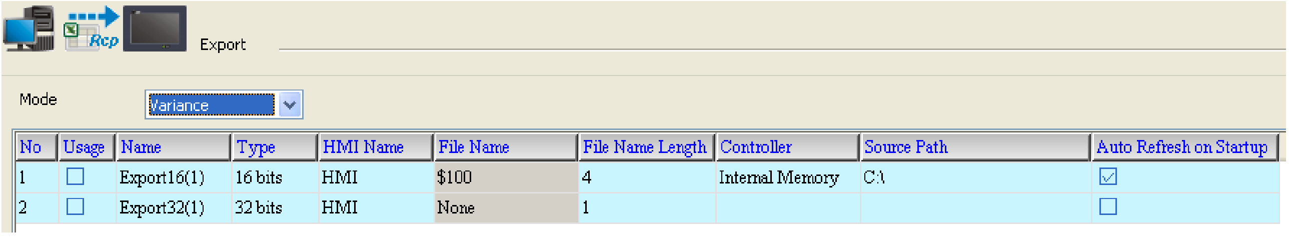
Export - Fixed



Mode: Fixed

No	Usage	Name	Type	HMI Name	Information	Modify Recipe	Auto Refresh on Startup
1	☐	Export1	16 bits	HMI	Length(3), Group(3)	-0223.rcp	☐

Export - Variance



Mode: Variance

No	Usage	Name	Type	HMI Name	File Name	File Name Length	Controller	Source Path	Auto Refresh on Startup
1	☐	Export16(1)	16 bits	HMI	$100	4	Internal Memory	C:\	☑
2	☐	Export32(1)	32 bits	HMI	None	1			☐

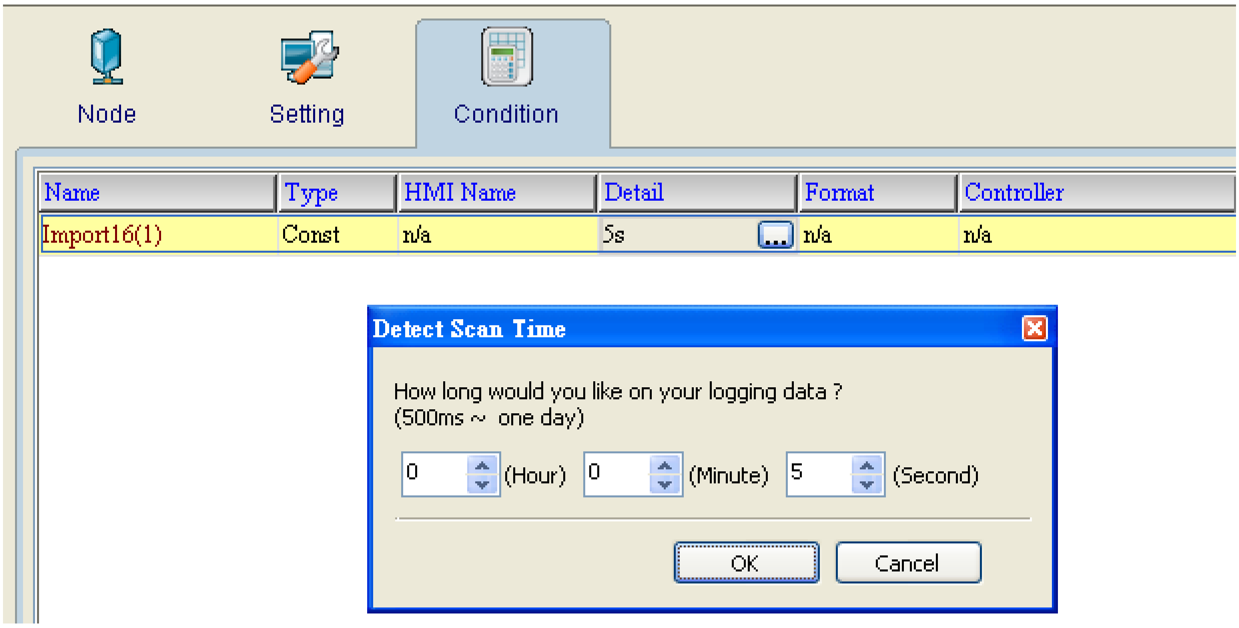
Setting Item	Description	Remark
No.	Excel Sheet index which the sampling data will be written.	Unchangeable
Usage	If the users want to select 16-bit recipe, enable this option by checking the check box.	
Name	Recipe display name	
Type	Recipe Bit type	Unchangeable
HMI Name	Name of connecting HMI	
Information	Length and Group of the recipe.	Unchangeable
Modify Recipe	Edit recipe directly for selected file	
File Name	It is the register address of a certain trigger element. Note: The register only could be set to Word.	
File Name Length	Number of characters by referring the user-defined file name.	
Controller	Connecting controller	Unchangeable
Source Path	Destination location where the exported file is located.	
Auto Refresh on Startup	Auto Refresh on Startup function for user could select when execute recipe at first. No matter what the condition set to Trigger or Const, if check auto refresh on start up function then eServer will execute Import or Export recipe at first time.	

11.1.3 Sampling Conditions

This step is used to set the sampling conditions. There are two kinds of options for selection:

1. Const (execute sampling repeatedly in a certain span of time)

   This option is used to determine how long the sampling process is repeated. The time unit can be defined as second, minute or hour.



Name	Type	HMI Name	Detail	Format	Controller
Import16(1)	Const	n/a	5s	n/a	n/a

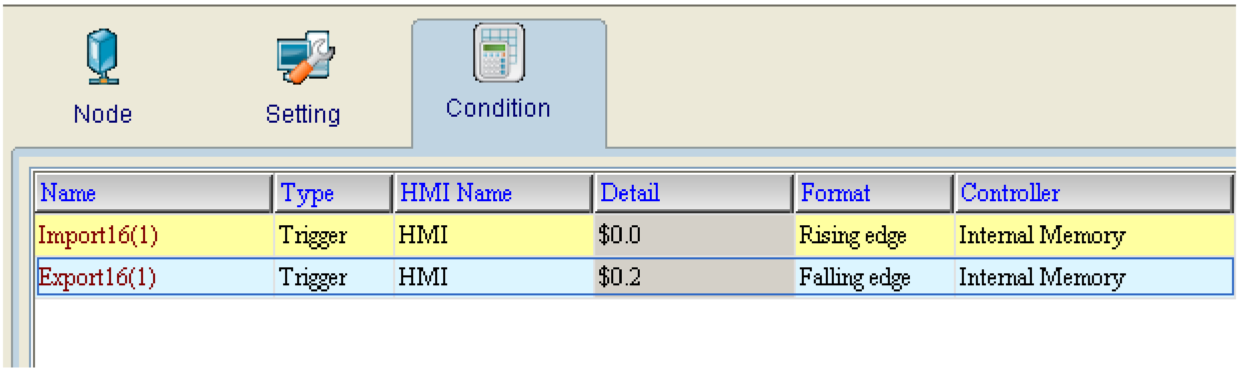
Detect Scan Time

How long would you like on your logging data ?
(500ms ~ one day)

0 (Hour) 0 (Minute) 5 (Second)

2. Trigger (Execute sampling when the trigger conditions are satisfied)

   This option is used to determine how long the sampling process is repeated when the trigger conditions are met. The detailed settings are described as follows:



Name	Type	HMI Name	Detail	Format	Controller
Import16(1)	Trigger	HMI	$0.0	Rising edge	Internal Memory
Export16(1)	Trigger	HMI	$0.2	Falling edge	Internal Memory

Polling Cycle (Sampling Cycle): It is used to determine how long the sampling process is repeated. The time unit is ms.

Logging Condition:

Setting Item	Description	Remark
No.	Condition number	Unchangeable
Type	Sampling type. There are two kinds of options for selection: Const and Trigger. Const: Execute sampling repeatedly in a certain span of time.	

Setting Item	Description	Remark
	Trigger: Execute sampling when the trigger conditions are satisfied.	
HMI Name	Name of connecting HMI	
Detail	Register Address and set Const time	
Format	1. When the register address is set to Bit, the selectable options are: A. Rising edge: Triggered by rising-edge B. Falling edge Triggered by falling-edge	
Controller	Connecting controller	Unchangeable

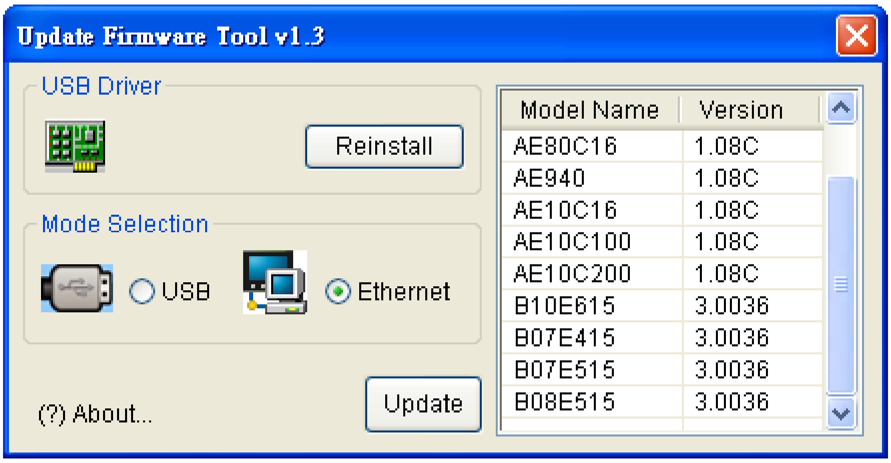
Chapter 12 Recipe Access Example

Before creating testing example, make sure to change the upload and download option (**Options > Environment**) on DOPSoft first. The default setting of upload and download is via **USB**. If the users need to use **Ethernet**, please change the default setting by referring to **Appendix A**.

12.1 Creating Example

Update Firmware

Remember to update the firmware before using eServer. To select this function, click **Start > Programs > Delta Industrial Automation > HMI > DOP eServer 1.00.xx > Update Firmware Tool**. After clicking **Update Firmware Tool**, the following dialog box will appear for the users to select the communication interface (the default setting is USB driver). Press **Update** button to update HMI firmware automatically.



○ USB ● Ethernet

Model Name	Version
AE80C16	1.08C
AE940	1.08C
AE10C16	1.08C
AE10C100	1.08C
AE10C200	1.08C
B10E615	3.0036
B07E415	3.0036
B07E515	3.0036
B08E515	3.0036

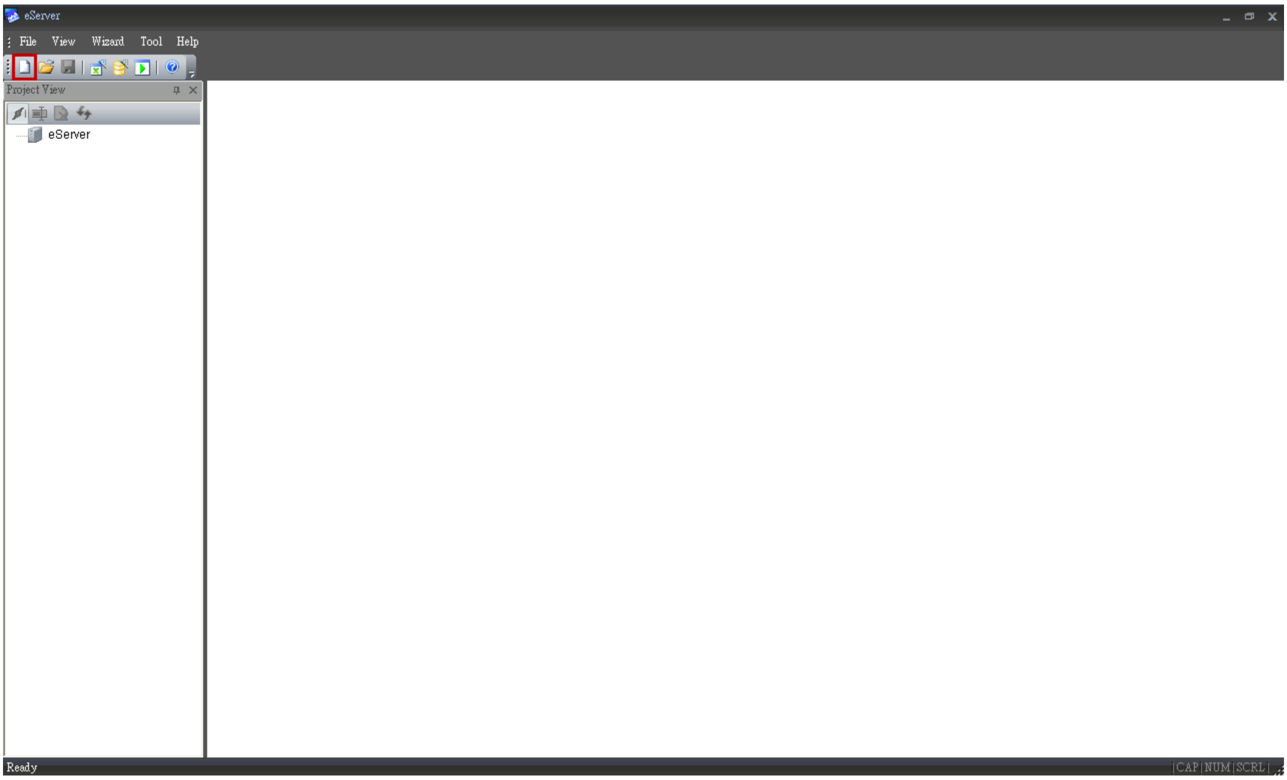
Start eServer

To start eServer, click **Start > Programs > Delta Industrial Automation > HMI > DOP eServer 1.00.xx > eServer**.

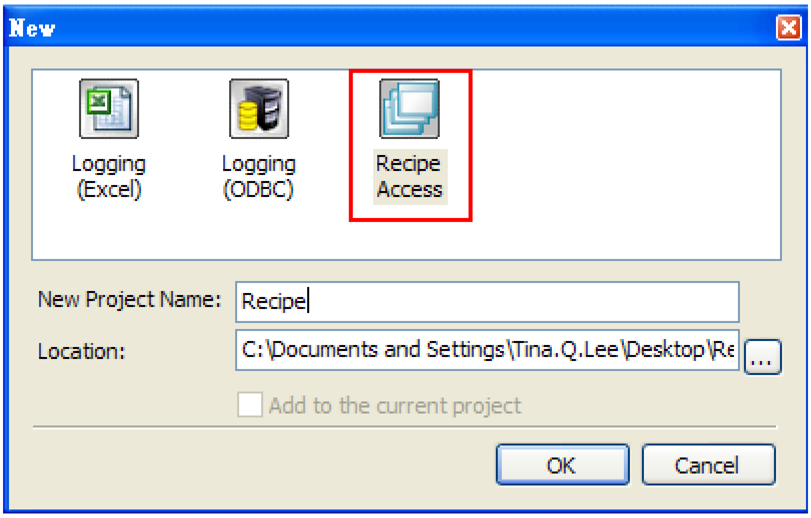
eServer
2012 Copyright. All rights reserved.Delta Electronics, Inc.
DELTA

12.1.1 New Project

Start eServer, and click **File > New** or click **New** icon


eServer
File
View
Wizard
Tool
Help
Project View
eServer
Ready
CAP NUM SCRL

After the **New** dialog box is opened, select **Recipe Access** icon and enter the file name **Recipe** for the Recipe Access database. Then, press **OK** button.



New
Logging (Excel)
Logging (ODBC)
Recipe Access
OK
Cancel
...

New Project Name: Recipe

Location: C:\Documents and Settings\Tina.Q.Lee\Desktop\Re

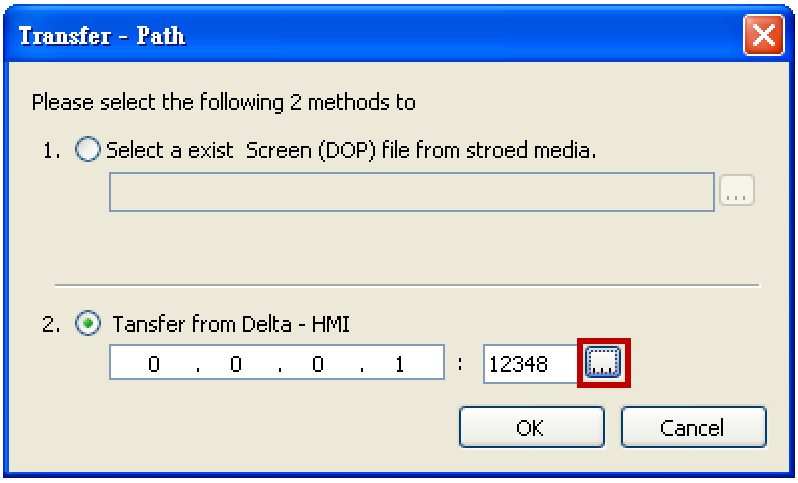
☐ Add to the current project

12.1.2 Node

Click icon to link HMI screen project file. There are two methods available for selection. Here choose **Select Transfer from Delta-HMI** option to create a new node.

Select Transfer from Delta-HMI

Via Ethernet to search IP address of the connecting HMI.



Transfer - Path

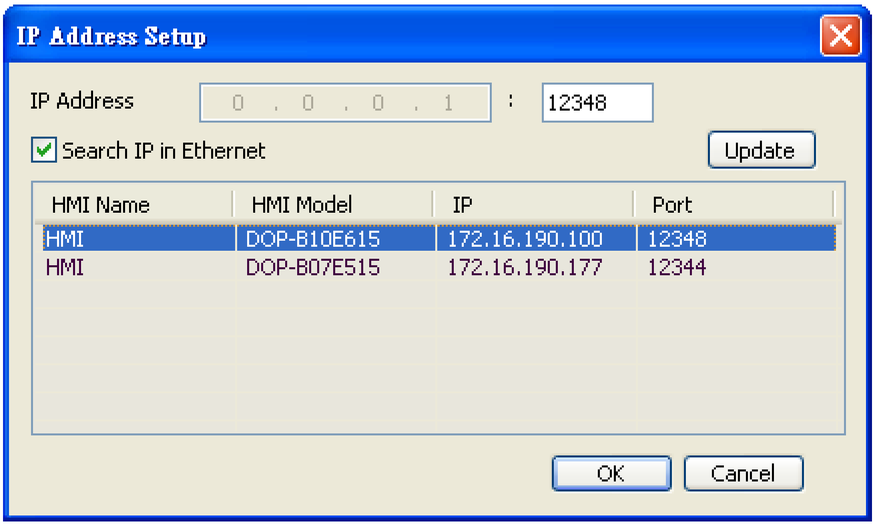
Please select the following 2 methods to

1. ○ Select a exist Screen (DOP) file from stroed media.

2. ● Tansfer from Delta - HMI

0 . 0 . 0 . 1 : 12348

After finishing the auto search, please select IP address is **172.16.190.100.**



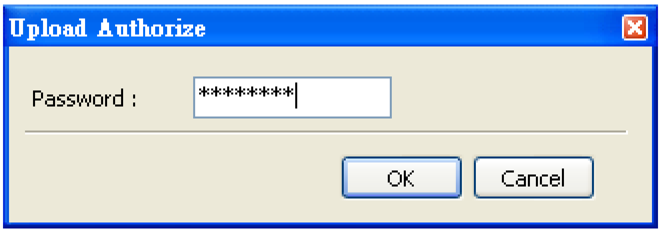
IP Address Setup

IP Address 0 . 0 . 0 . 1 : 12348

☑ Search IP in Ethernet

HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348
HMI	DOP-B07E515	172.16.190.177	12344

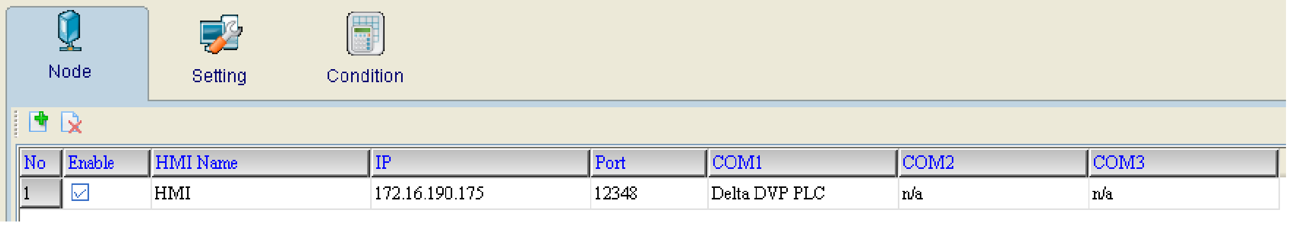
Press **OK** button to input authorize password, default password is 12345678.



Upload Authorize

Password : ********

Input correct password then eServer will get HMI data like HMI Name, IP address as below.



No	Enable	HMI Name	IP	Port	COM1	COM2	COM3
1	☑	HMI	172.16.190.175	12348	Delta DVP PLC	n/a	n/a

12.1.3 Setting and Condition - Import

When the node is set correctly, click **Setting** and complete the settings next. There are two modes, Import and Export available for selection. Each mode provides two options, Fixed or Variance from the drop-down list for use.

Import – Fixed

Setting :

a. Select **Fixed**.

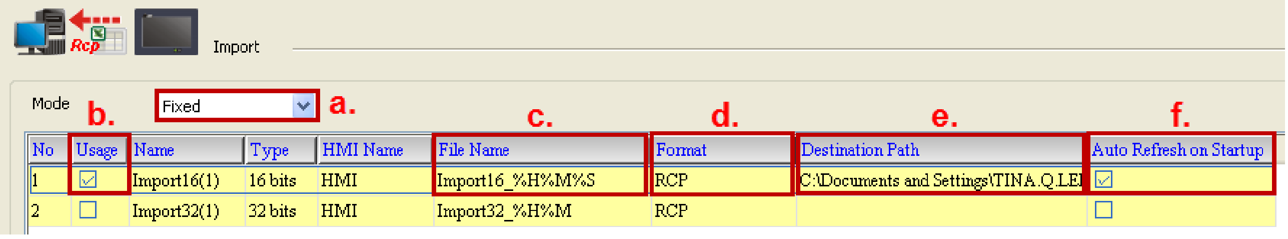
b. Check the check box to use **16-bit recipe** as the example.

c. User-define the **File Name** as **Import16_%H%M%S.**

d. Select Format to RCP.

e. Set **Destination Path** (destination location) where the imported file is located.

f. Enable Auto Refresh on Startup



Mode: Fixed

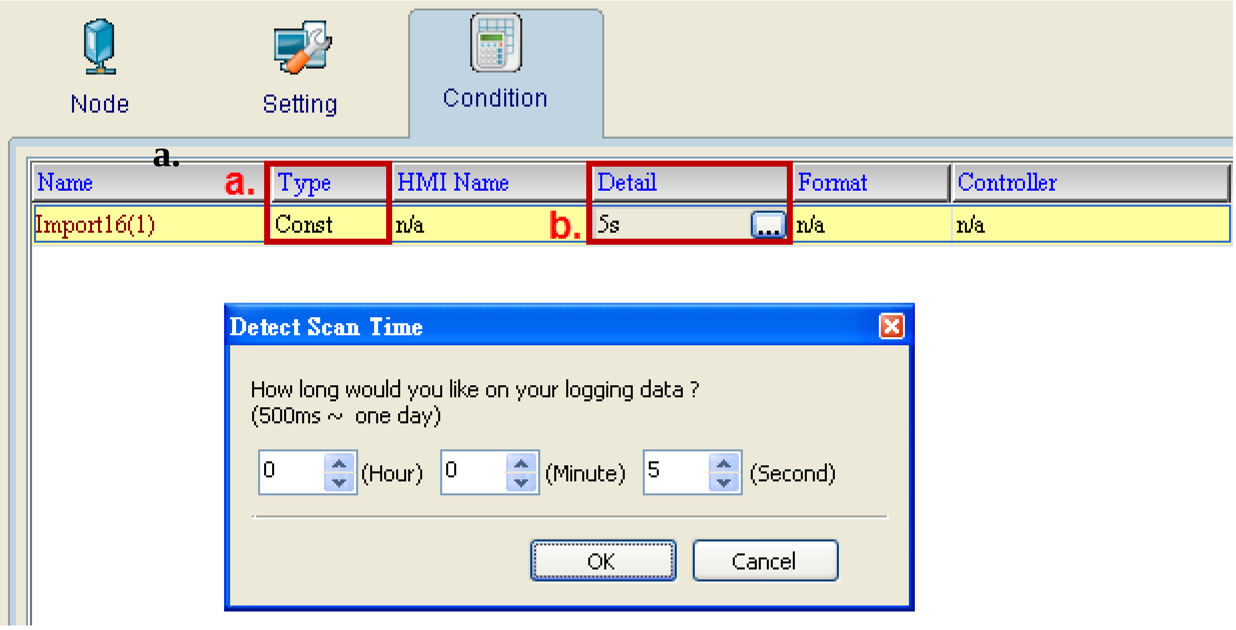
No	Usage	Name	Type	HMI Name	File Name	Format	Destination Path	Auto Refresh on Startup
1	☑	Import16(1)	16 bits	HMI	Import16_%H%M%S	RCP	C:\Documents and Settings\TINA.Q.LE	☑
2	☐	Import32(1)	32 bits	HMI	Import32_%H%M	RCP		☐

Condition :

As for the method of sampling condition, select **Const (execute sampling repeatedly in a certain span of time)**.

a. Select **Const**.

b. Set **Polling Cycle** (sampling cycle) to **5s** (default setting value).



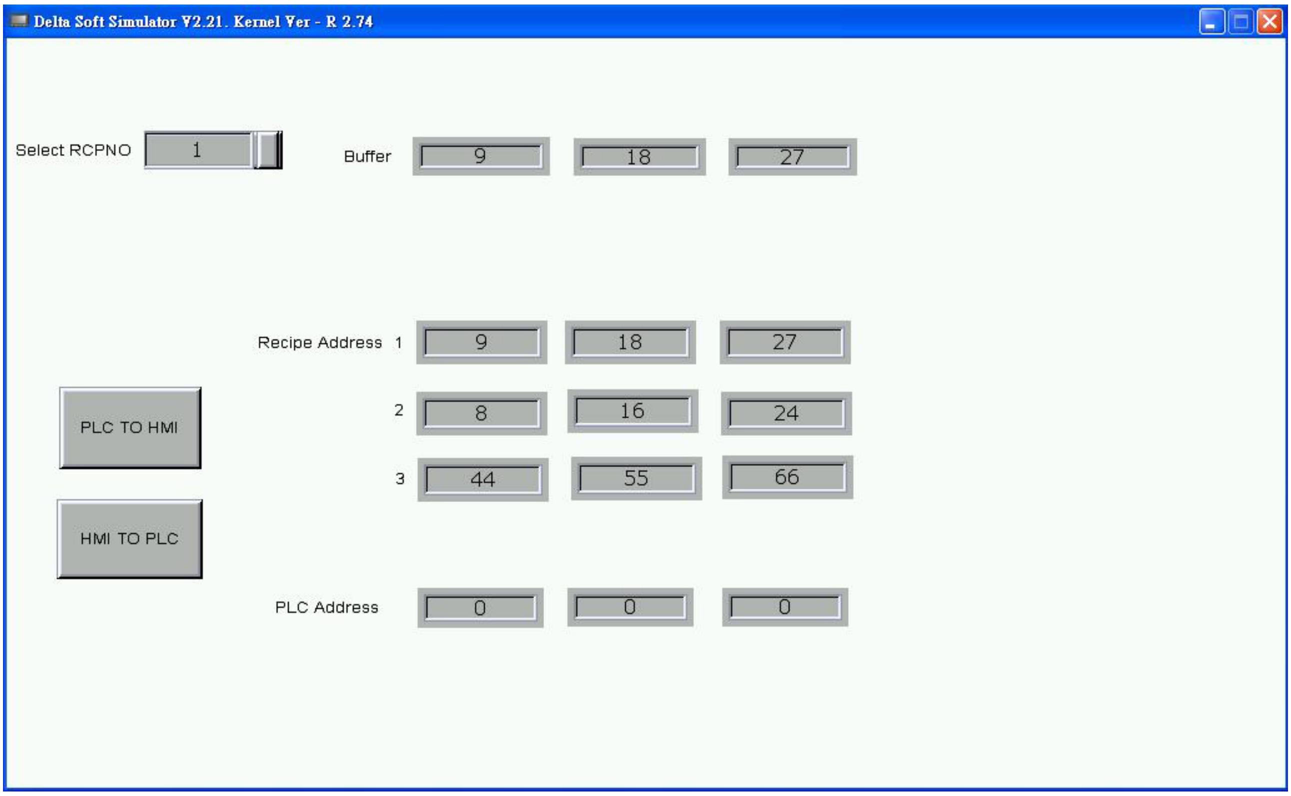
Name	Type	HMI Name	Detail	Format	Controller
Import16(1)	Const	n/a	5s	n/a	n/a

Detect Scan Time

How long would you like on your logging data ?
(500ms ~ one day)

0 (Hour) 0 (Minute) 5 (Second)

After completing all the settings on eServer, use the most updated DOPSoft program editing software to open the selected .dps file which just has been modified on eServer. Then, compile it and download the recipe data to HMI. The screen data will be shown as the figure below:



Delta Soft Simulator V2.21. Kernel Ver - R 2.74

Select RCPNO 1

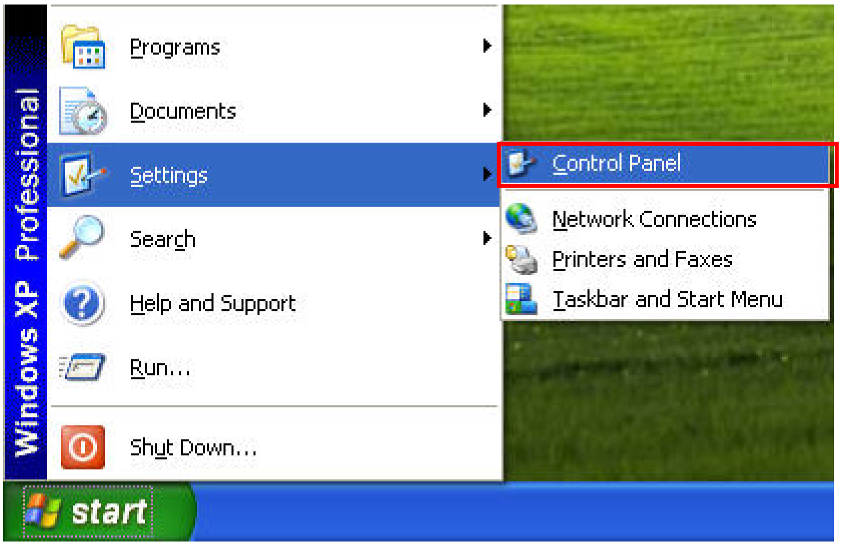
Buffer	9	18	27
Recipe Address 1	9	18	27
2	8	16	24
3	44	55	66
PLC Address	0	0	0

After downloading the recipe data, please make sure that the IP address numbers of subnet masks of the PC (172.16.190.1) and HMI (172.16.190.100) are the same; otherwise, HMI may not be displayed in the list when finding node.

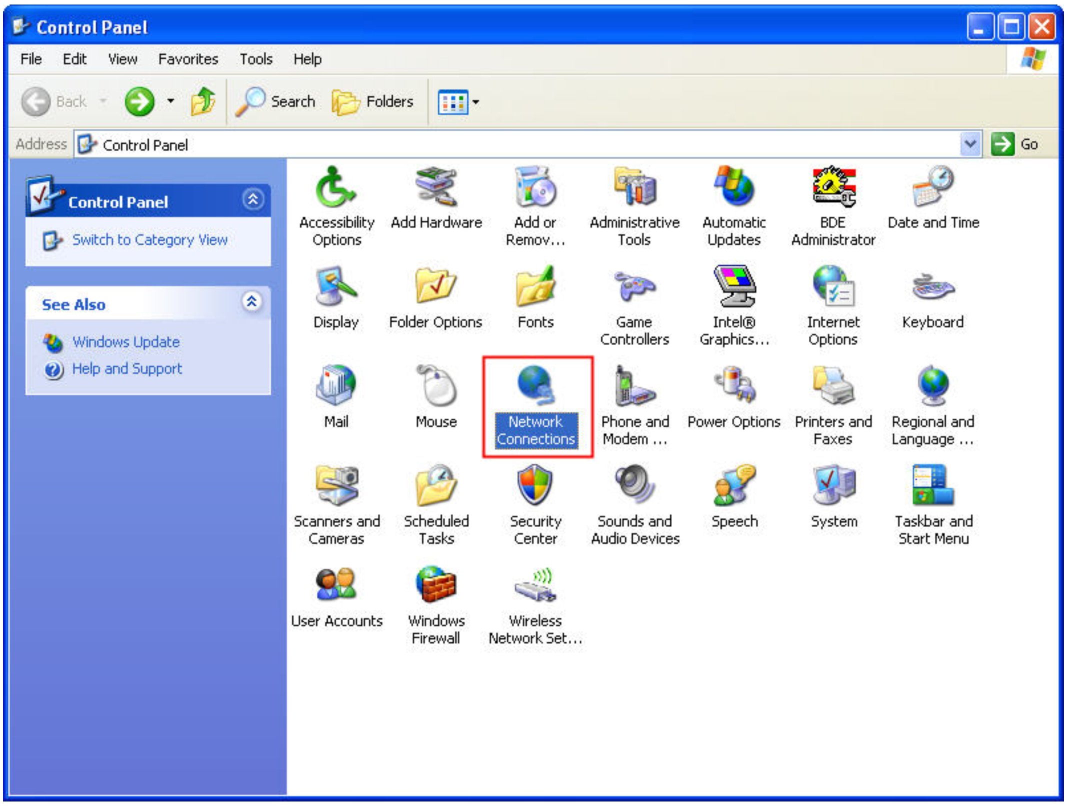
Networking Settings

Ensure to observe the following instructions to complete PC networking settings before eServer operation.

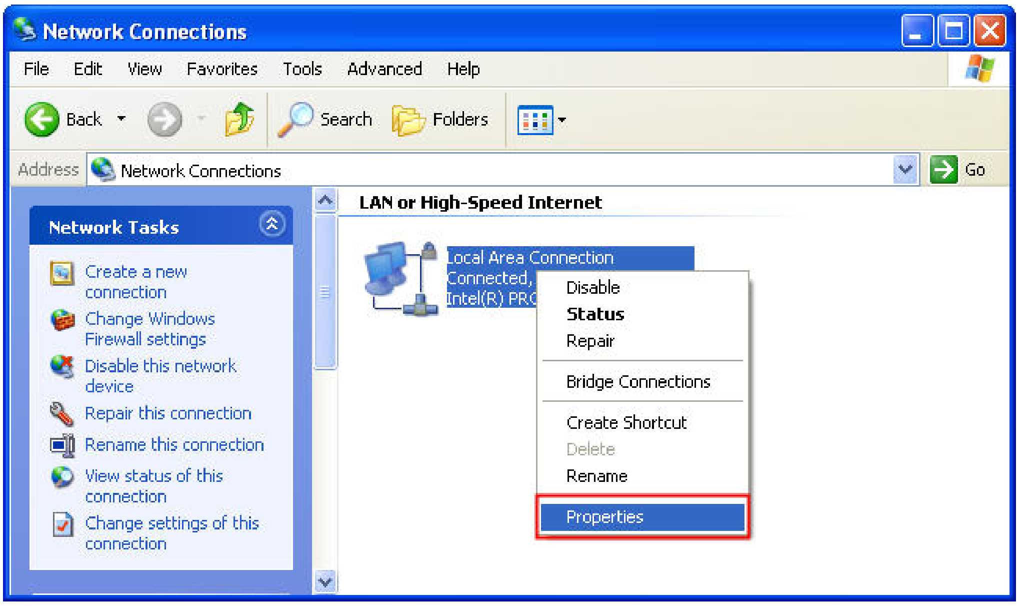
Setting PC Network


Windows XP Professional
Programs
Documents
Settings
Search
Help and Support
Run...
Shut Down...
start
Control Panel
Network Connections
Printers and Faxes
Taskbar and Start Menu

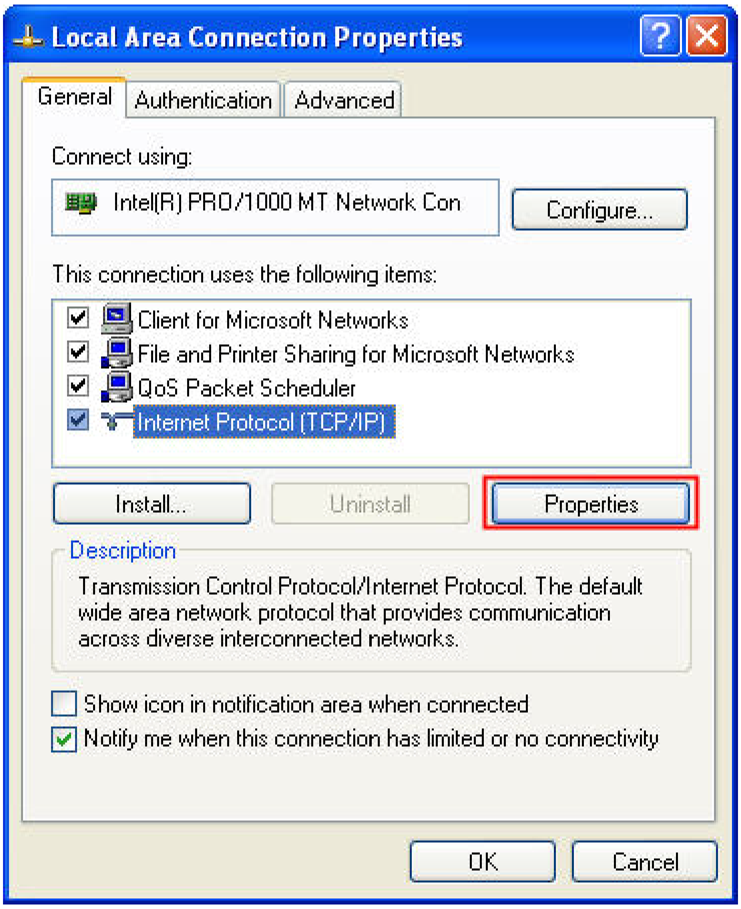
Power on PC and start Windows. Click **Start > Programs**, point to Control Panel, and then select **Network Connections** (Network Connections)..


Control Panel
File Edit View Favorites Tools Help
Back
Search
Folders
Address Control Panel
Go
Control Panel
Switch to Category View
See Also
Windows Update
Help and Support
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Automatic Updates
BDE Administrator
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel® Graphics...
Internet Options
Keyboard
Mail
Mouse
Network Connections
Phone and Modem ...
Power Options
Printers and Faxes
Regional and Language ...
Scanners and Cameras
Scheduled Tasks
Security Center
Sounds and Audio Devices
Speech
System
Taskbar and Start Menu
User Accounts
Windows Firewall
Wireless Network Set...

Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.


Network Connections
File Edit View Favorites Tools Advanced Help
Back
Search
Folders
Address Network Connections
Go
Network Tasks
Create a new connection
Change Windows Firewall settings
Disable this network device
Repair this connection
Rename this connection
View status of this connection
Change settings of this connection
LAN or High-Speed Internet
Local Area Connection
Connected,
Intel(R) PRO
Disable
Status
Repair
Bridge Connections
Create Shortcut
Delete
Rename
Properties

The **Local Area Connection Properties** dialog box will open. Use **General** tab to select **Internet Protocol (TCP/IP)**. Then, press **Properties** button.


Local Area Connection Properties
General
Authentication
Advanced
Configure...
Install...
Uninstall
Properties
OK
Cancel

Connect using:

Intel(R) PRO/1000 MT Network Con

This connection uses the following items:

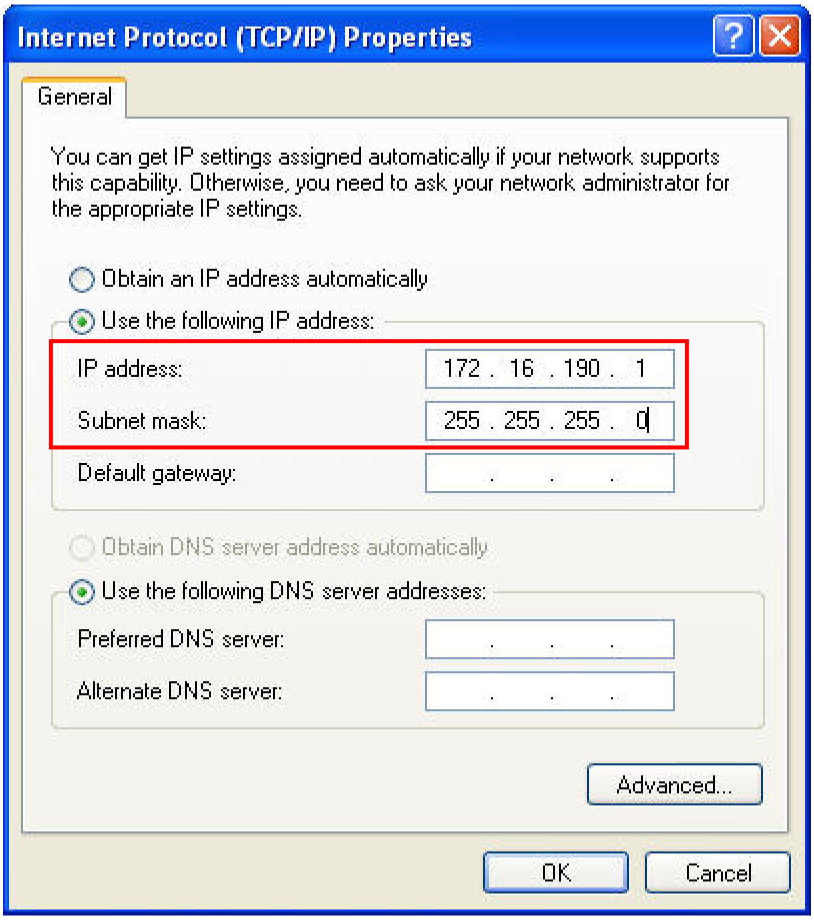
☑ Client for Microsoft Networks
☑ File and Printer Sharing for Microsoft Networks
☑ QoS Packet Scheduler
☑ Internet Protocol (TCP/IP)

Description

Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in notification area when connected
☑ Notify me when this connection has limited or no connectivity

The **Internet Protocol (TCP/IP) Properties** dialog box will open. Choose **Use the following IP address** and enter the IP address numbers of the PC into the field of **IP address** and **Subnet mask**.



You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically
● Use the following IP address:

IP address: 172 . 16 . 190 . 1
Subnet mask: 255 . 255 . 255 . 0
Default gateway: . . .

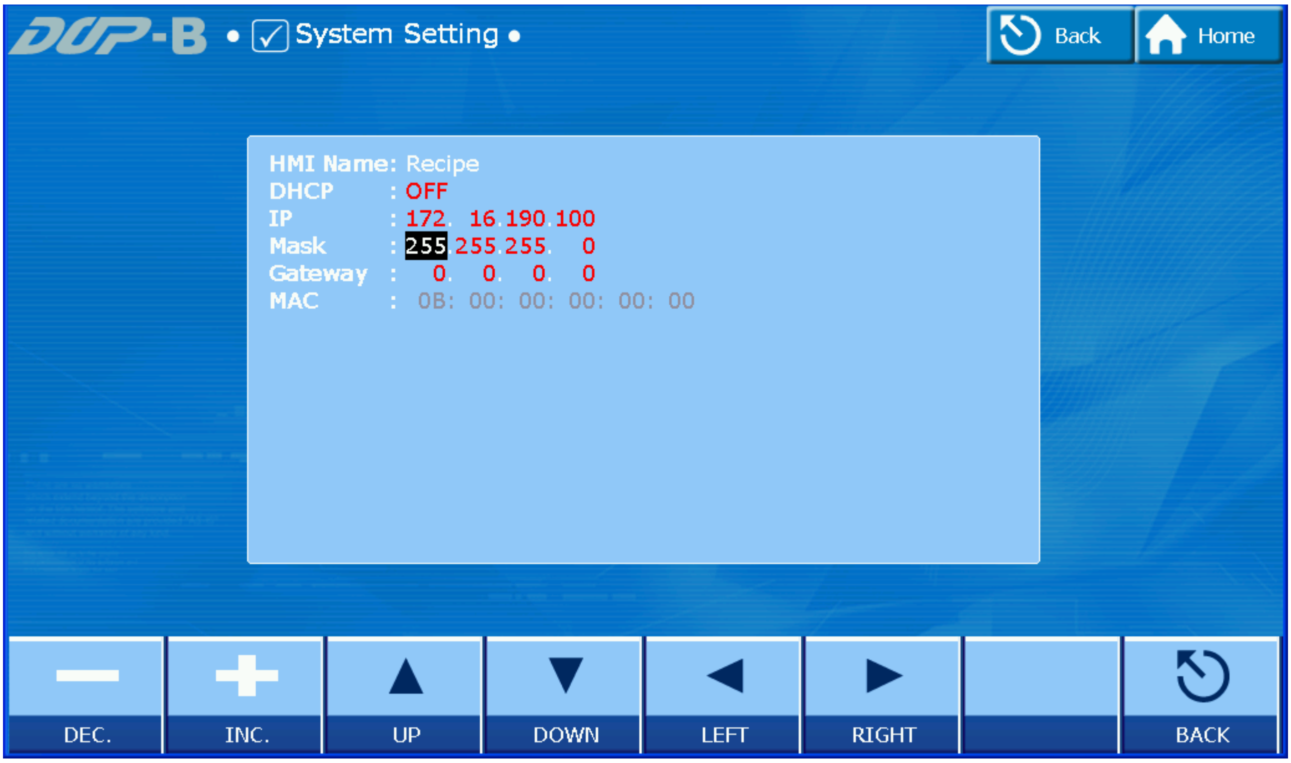
○ Obtain DNS server address automatically
● Use the following DNS server addresses:

Preferred DNS server: . . .
Alternate DNS server: . . .

Then, press **OK** button to finish the settings.

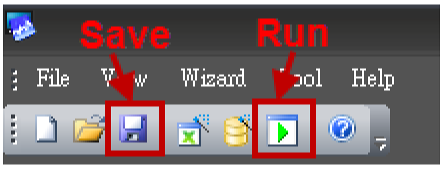
Setting IP Address in HMI

Enter into the system menu and set IP address to 172.16.190.100. Please see the figure below:

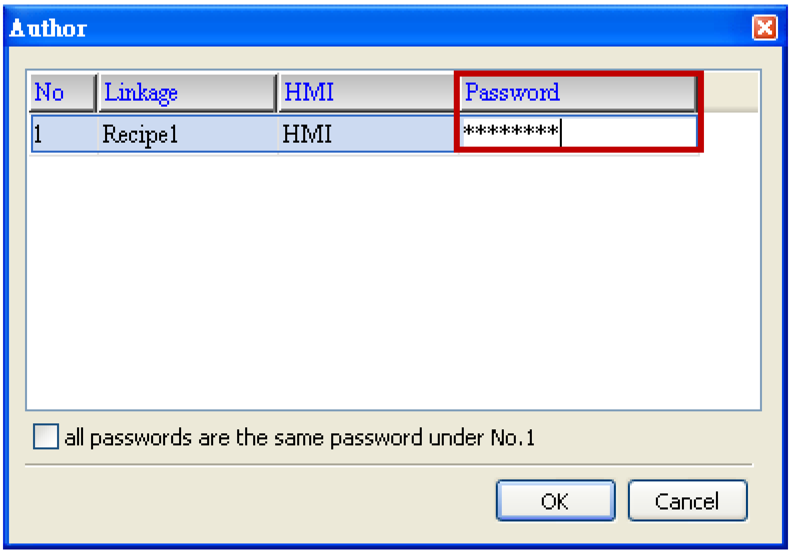

DOP-B
System Setting
Back
Home
DEC.
INC.
UP
DOWN
LEFT
RIGHT
BACK

HMI Name: Recipe
DHCP : OFF
IP : 172. 16.190.100
Mask : 255.255.255. 0
Gateway : 0. 0. 0. 0
MAC : 0B: 00: 00: 00: 00: 00

After networking settings are set correctly and successfully, return to eServer, save the file first and then run the recipe data. Please see the figure below:


Save
Run
File
Wizard
Help

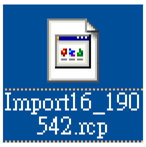
Press icon. The following dialog box will pop-up and ask the users to enter the password.


Author
OK
Cancel

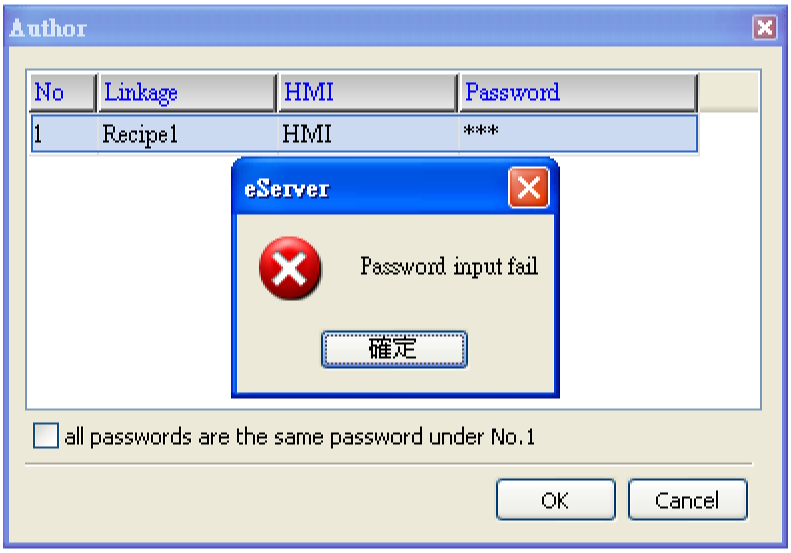
No	Linkage	HMI	Password
1	Recipe1	HMI	********

☐ all passwords are the same password under No.1

Please enter 12345678 in the filed of the password at the first time (12345678 is the default setting value and the users can change it freely). After the correct password is entered, the icon will display on the tool bar at the left-bottom corner.

When eServer performs reading, due to enable the auto refresh on startup, eServer will execute import recipe to destination path. But if disable the auto refresh on startup, eServer will wait for 5 second then the eServer execute import recipe to destination path. After import recipe, user could examine and check if the saved file name is saved in the destination path or not. Please refer to the figure such as .

On the other hand, if incorrect or invalid password is entered, the following error message dialog box will appear to alert the users.



Author

No	Linkage	HMI	Password
1	Recipe1	HMI	***

eServer

Password input fail

Import - Variance

Setting :

a. Select **Variance**.

b. Check the check box to use **16-bit recipe** as the example.

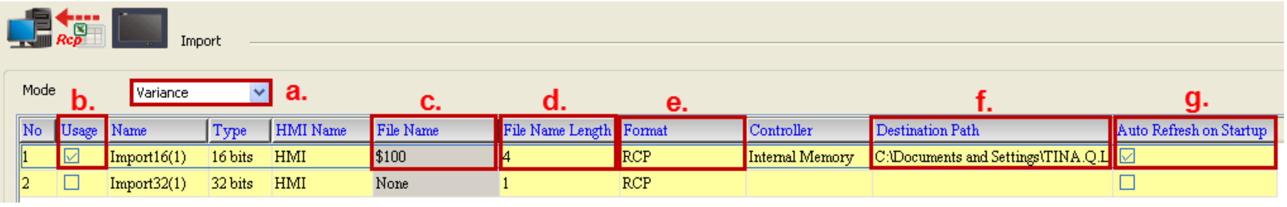
c. Set the **File Name** (file name of the imported file) to be the same as the register address of HMI. (In this case $100 character input element is used)

d. Set **File Name Length** (number of the imported characters). (In this case the File Name Length is set to 4. This is because the name of the imported file is Tina.csv. The system will refer to “Tina” these four characters and convert the imported file to Tina.rcp and then save it to the destination path.)

e. Select Format as RCP.

f. Set **Destination Path** (destination location) where the imported file is located.

g. Enable Auto Refresh on Startup.



Mode: Variance

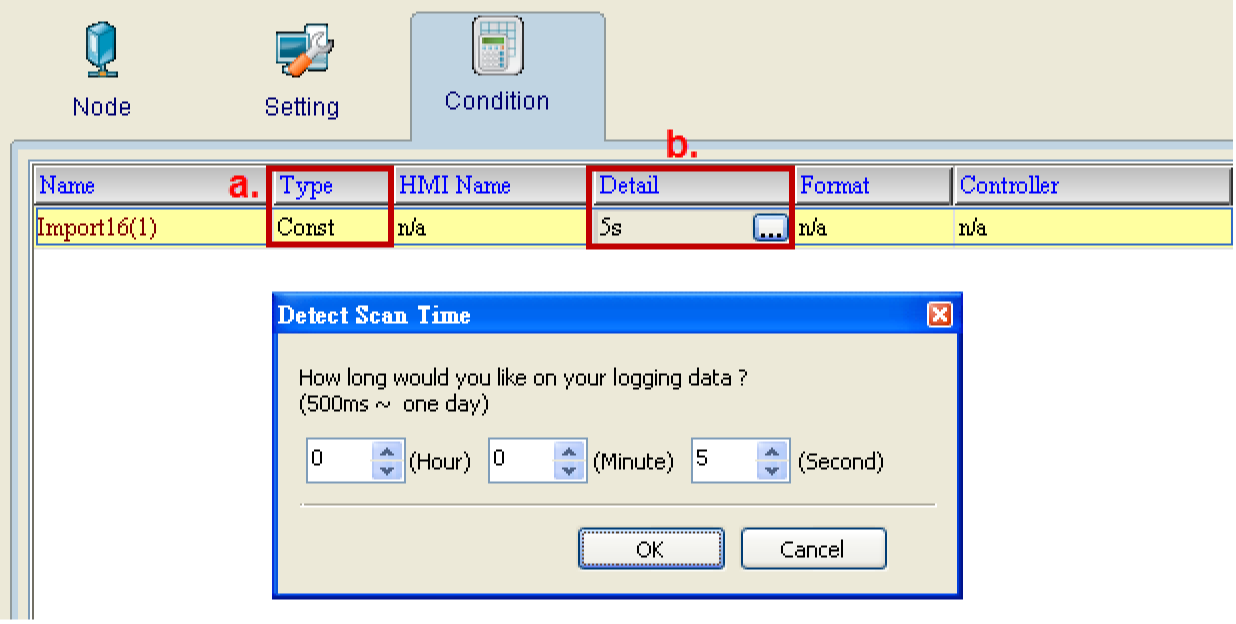
No	Usage	Name	Type	HMI Name	File Name	File Name Length	Format	Controller	Destination Path	Auto Refresh on Startup
1	☑	Import16(1)	16 bits	HMI	$100	4	RCP	Internal Memory	C:\Documents and Settings\TINA.Q.L	☑
2	☐	Import32(1)	32 bits	HMI	None	1	RCP			☐

Condition :

As for the method of sampling condition, select **Const (execute sampling repeatedly in a certain span of time)**.

a. Select **Const**.

b. Set **Polling Cycle** (sampling cycle) to **5s** (default setting value).



Name	Type	HMI Name	Detail	Format	Controller
Import16(1)	Const	n/a	5s	n/a	n/a

How long would you like on your logging data ?
(500ms ~ one day)

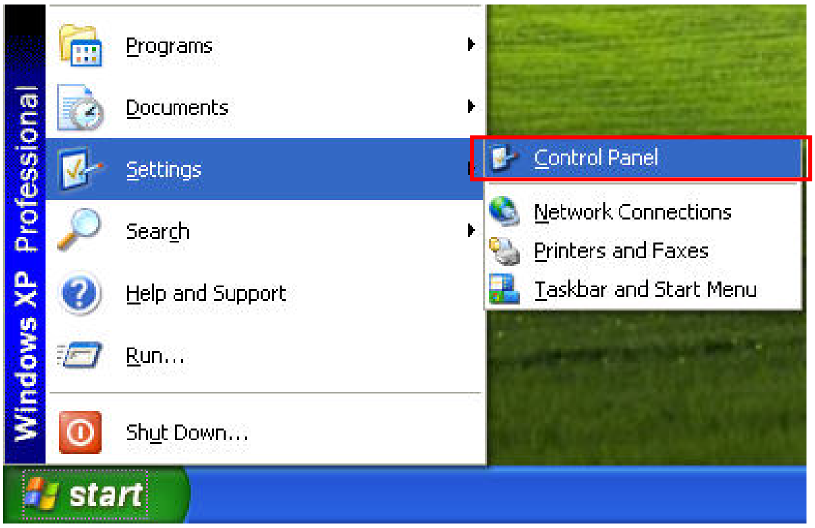
0 (Hour) 0 (Minute) 5 (Second)

After completing all the settings, please make sure that the IP address numbers of subnet masks of the PC (172.16.190.1) and HMI (172.16.190.100) are the same; otherwise, HMI may not be displayed in the list when finding node.

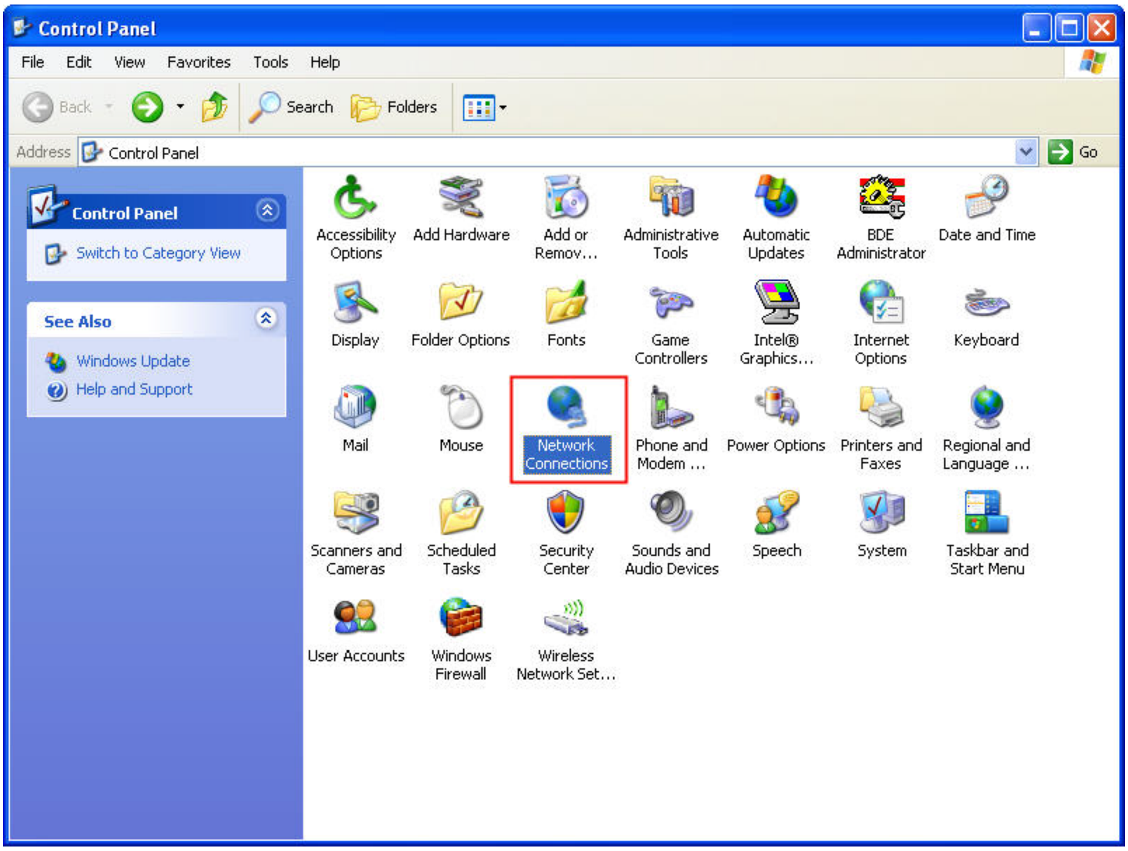
Networking Settings

Ensure to observe the following instructions to complete PC networking settings before eServer operation.

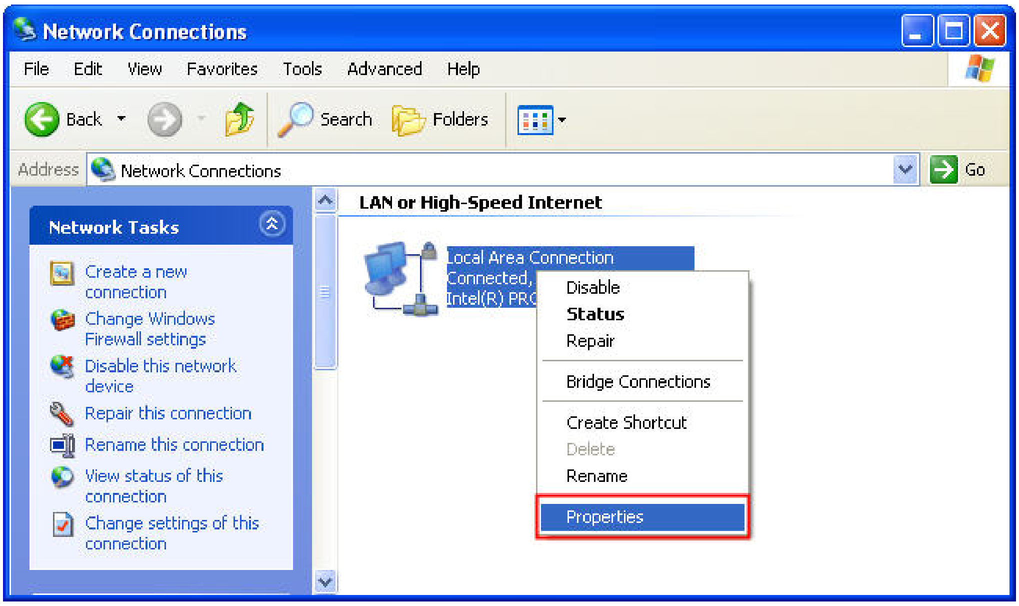
Setting PC Network


Windows XP Professional
Programs
Documents
Settings
Search
Help and Support
Run...
Shut Down...
Control Panel
Network Connections
Printers and Faxes
Taskbar and Start Menu
start

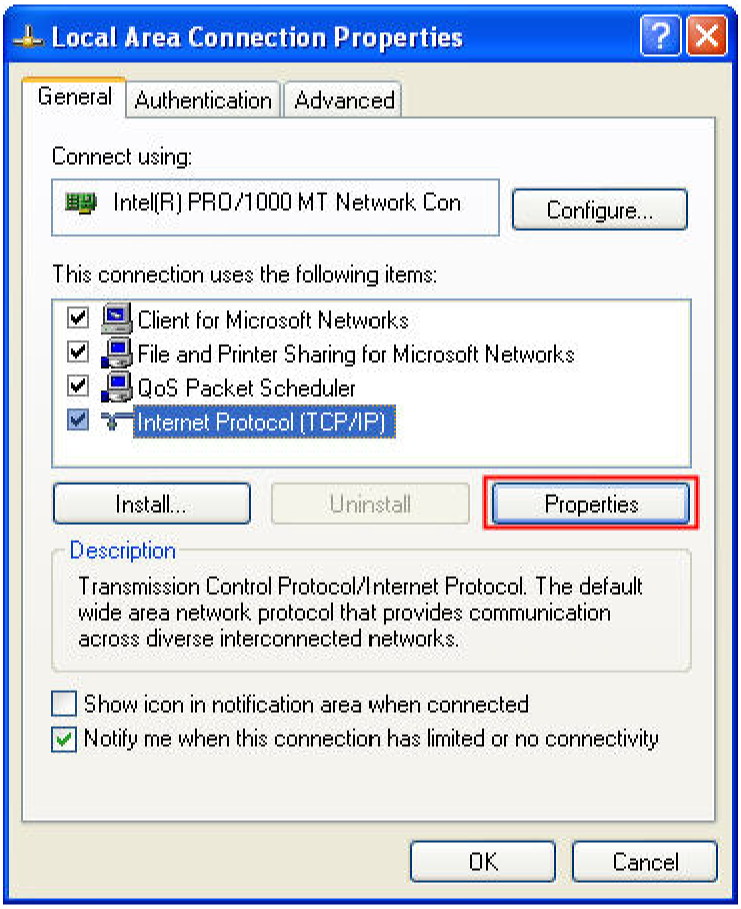
Power on PC and start Windows. Click **Start > Programs**, point to Control Panel, and then select Network Connections (Network Connections).


Control Panel
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
Address
Control Panel
Go
Control Panel
Switch to Category View
See Also
Windows Update
Help and Support
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Automatic Updates
BDE Administrator
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel® Graphics...
Internet Options
Keyboard
Mail
Mouse
Network Connections
Phone and Modem ...
Power Options
Printers and Faxes
Regional and Language ...
Scanners and Cameras
Scheduled Tasks
Security Center
Sounds and Audio Devices
Speech
System
Taskbar and Start Menu
User Accounts
Windows Firewall
Wireless Network Set...

Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.


Network Connections
File
Edit
View
Favorites
Tools
Advanced
Help
Back
Search
Folders
Address
Network Connections
Go
Network Tasks
Create a new connection
Change Windows Firewall settings
Disable this network device
Repair this connection
Rename this connection
View status of this connection
Change settings of this connection
LAN or High-Speed Internet
Local Area Connection
Connected,
Intel(R) PRO
Disable
Status
Repair
Bridge Connections
Create Shortcut
Delete
Rename
Properties

The **Local Area Connection Properties** dialog box will open. Use **General** tab to select **Internet Protocol (TCP/IP)**. Then, press **Properties** button.


Local Area Connection Properties
General
Authentication
Advanced
Configure...
Install...
Uninstall
Properties
OK
Cancel

Connect using:

Intel(R) PRO/1000 MT Network Con

This connection uses the following items:

- ☑ Client for Microsoft Networks
- ☑ File and Printer Sharing for Microsoft Networks
- ☑ QoS Packet Scheduler
- ☑ Internet Protocol (TCP/IP)

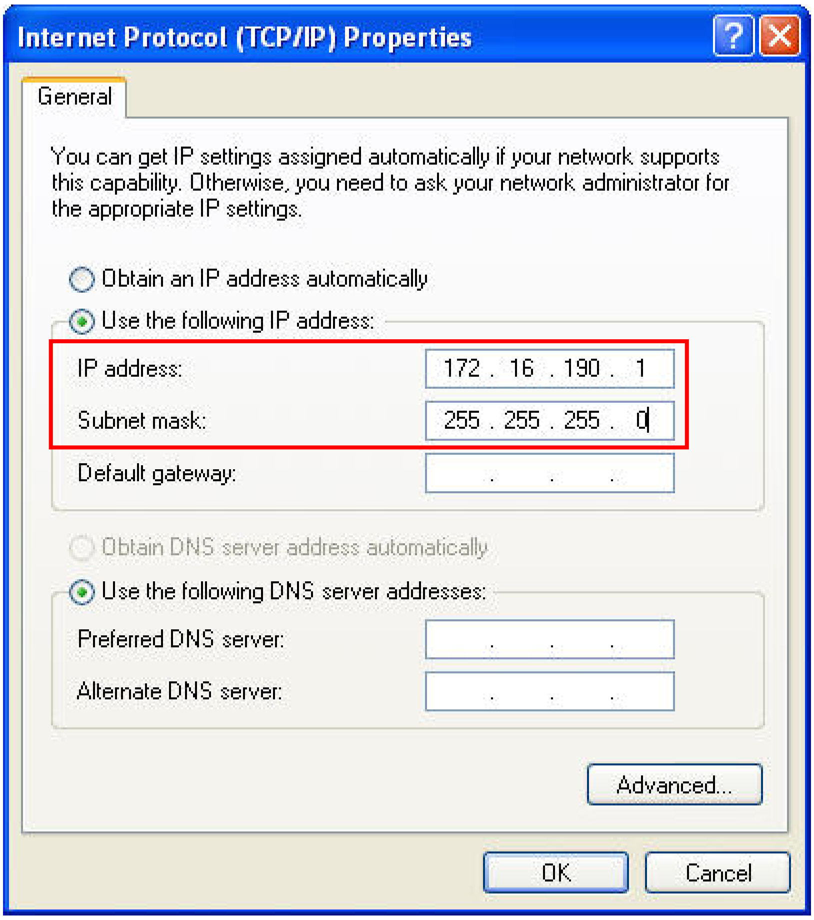
Description

Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in notification area when connected

☑ Notify me when this connection has limited or no connectivity

The **Internet Protocol (TCP/IP) Properties** dialog box will open. Choose **Use the following IP address** and enter the IP address numbers of the PC into the field of **IP address** and **Subnet mask**.



Internet Protocol (TCP/IP) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically

● Use the following IP address:

IP address: 172 . 16 . 190 . 1

Subnet mask: 255 . 255 . 255 . 0

Default gateway: . . .

○ Obtain DNS server address automatically

● Use the following DNS server addresses:

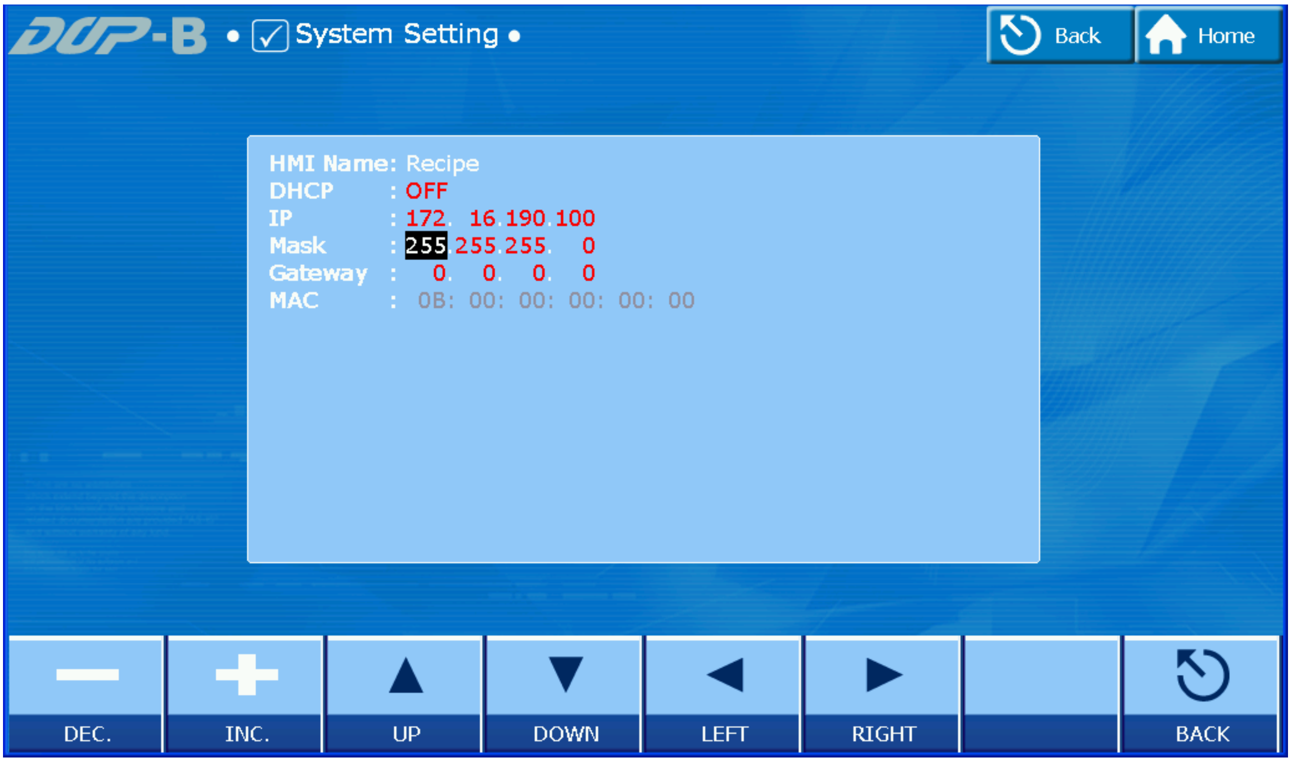
Preferred DNS server: . . .

Alternate DNS server: . . .

Then, press **OK** button to finish the settings.

Setting IP Address in HMI

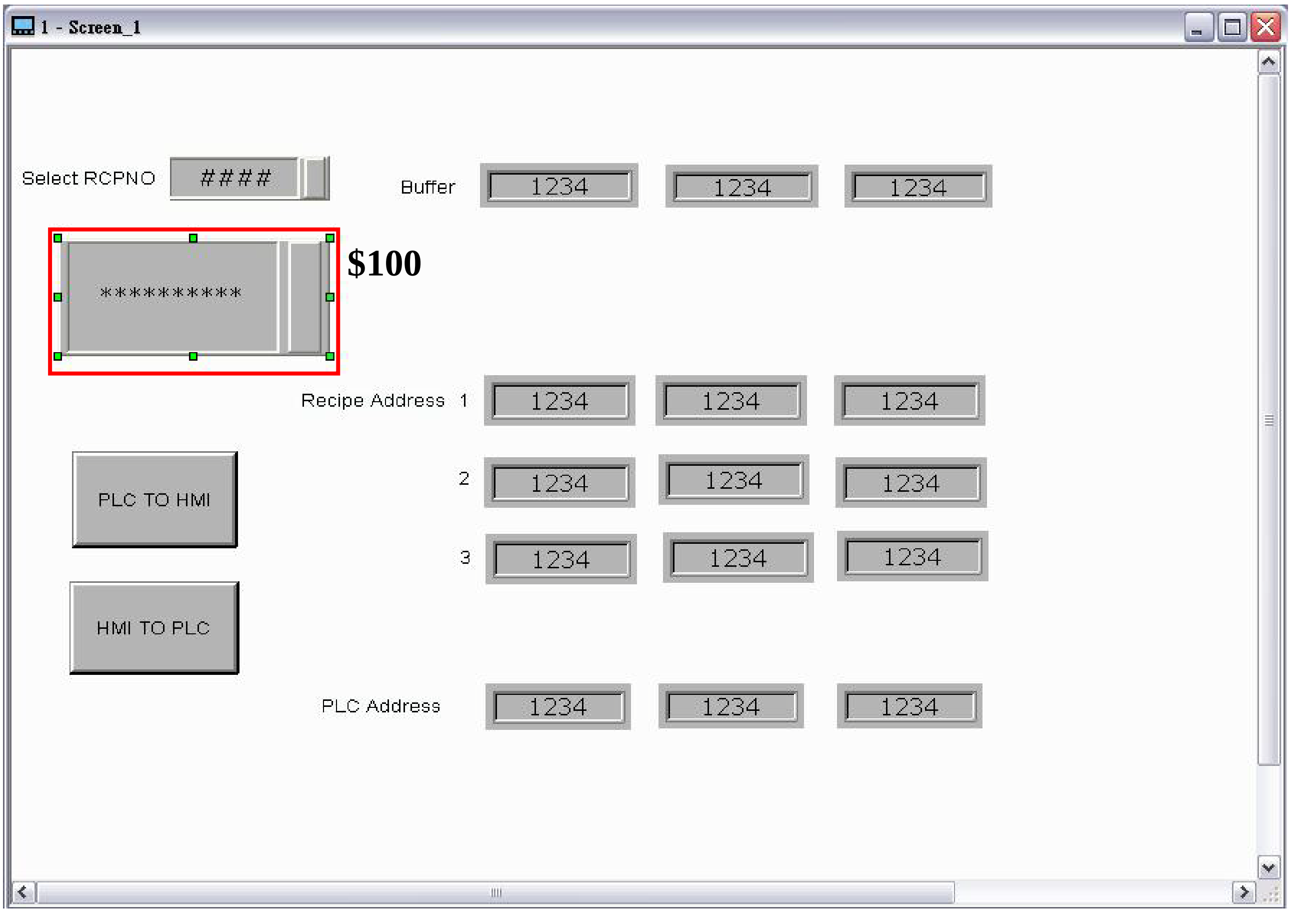
Enter into the system menu and set IP address to 172.16.190.100. Please see the figure below:



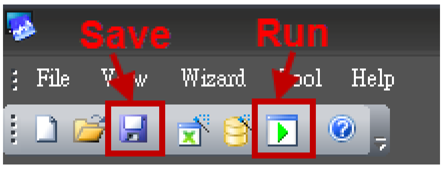
DOP-B • System Setting •

HMI Name: Recipe
DHCP : OFF
IP : 172. 16.190.100
Mask : 255.255.255. 0
Gateway : 0. 0. 0. 0
MAC : 0B: 00: 00: 00: 00: 00

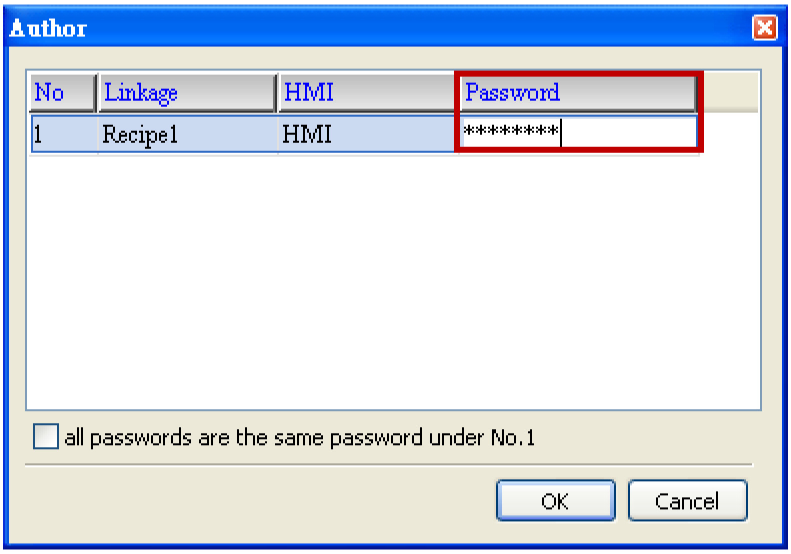
After completing all the settings and make sure that the communication is good, use the most updated DOPSoft program editing software to open the selected .dps file which just has been modified on eServer. Create a character input element and set its address to $100.


1 - Screen_1
Select RCPNO
####
Buffer
1234
$100
****
Recipe Address 1
2
3
PLC TO HMI
HMI TO PLC
PLC Address

Then, compile it and download the recipe data to HMI. After recipe data is downloaded to HMI successfully, please trigger the character input element on HMI and enter TINA these four characters at first, then return to eServer, save the file first and then run the recipe data.


Save
Run
File
View
Wizard
Tool
Help

Press icon. The following dialog box will pop-up and ask the users to enter the password.



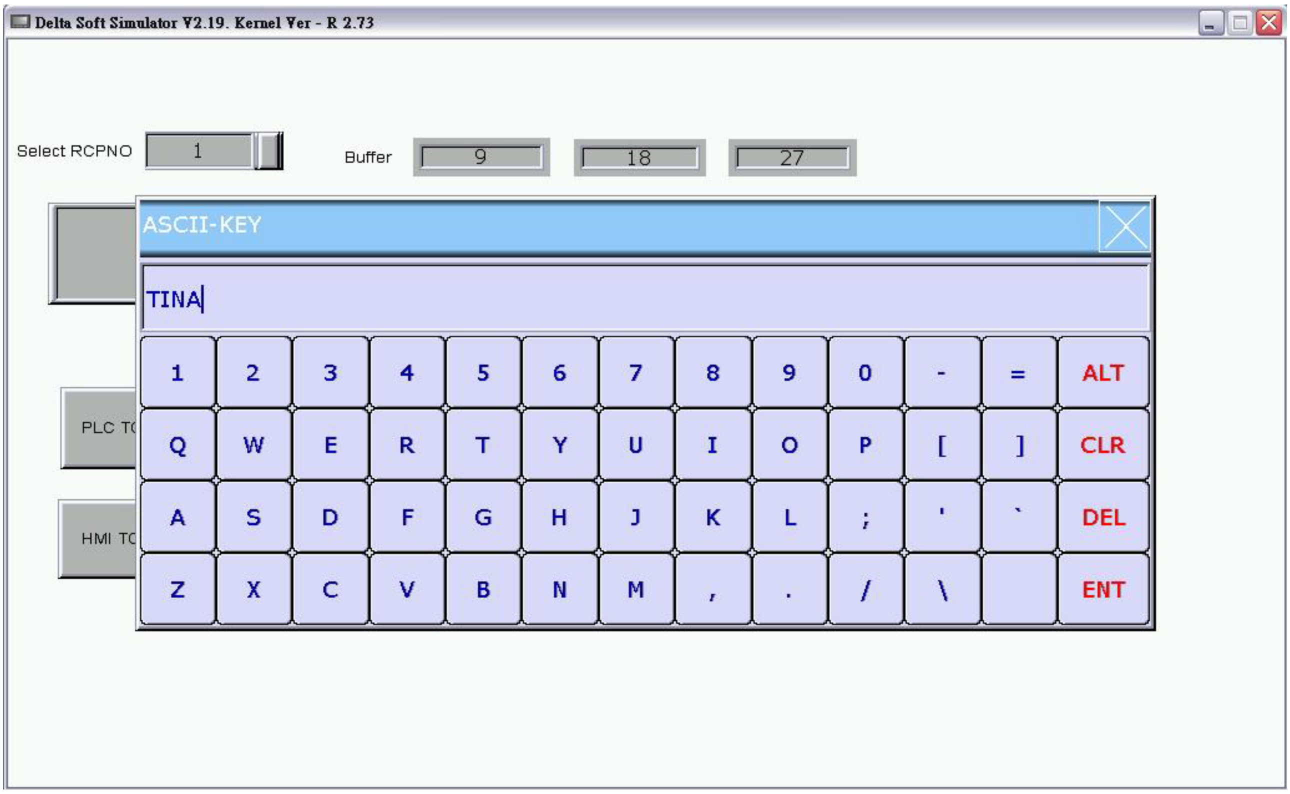
Author

No	Linkage	HMI	Password
1	Recipe1	HMI	********

☐ all passwords are the same password under No.1

Please enter 12345678 in the filed of the password at the first time (12345678 is the default setting value and the users can change it freely). After the correct password is entered, the icon will display on the tool bar at the left-bottom corner.

When eServer performs reading, due to enable auto refresh on startup, it will auto import recipe to destination path, but if disable enable auto refresh on startup, please trigger the character input element on HMI and enter TINA these four characters, then wait for 5 second to import recipe to destination path. Please refer to the figure below:



Delta Soft Simulator V2.19. Kernel Ver - R 2.73

Select RCPNO 1

Buffer 9 18 27

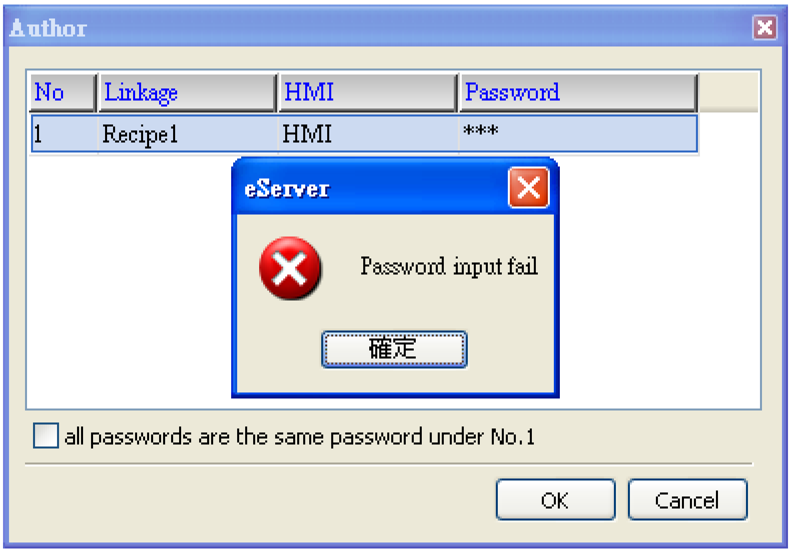
ASCII-KEY

TINA

PLC TO
HMI TO
1 2 3 4 5 6 7 8 9 0 - = ALT
Q W E R T Y U I O P [ ] CLR
A S D F G H J K L ; ' ` DEL
Z X C V B N M , . / \ ENT

Then, the system will examine and check if the saved file name is saved in the destination path or not. Please refer to the figure such as .

On the other hand, if incorrect or invalid password is entered, the following error message dialog box will appear to alert the users.



No	Linkage	HMI	Password
1	Recipe1	HMI	***

Password input fail

☐ all passwords are the same password under No.1

12.1.4 Setting and Condition - Export

Export – Fixed

Setting :

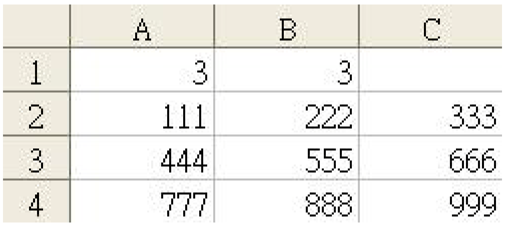
a. Press ✚ to add file name as **-0223.rcp** of export file.

b. Select **Fixed**.

c. Check the check box to use **16-bit recipe** as the example.

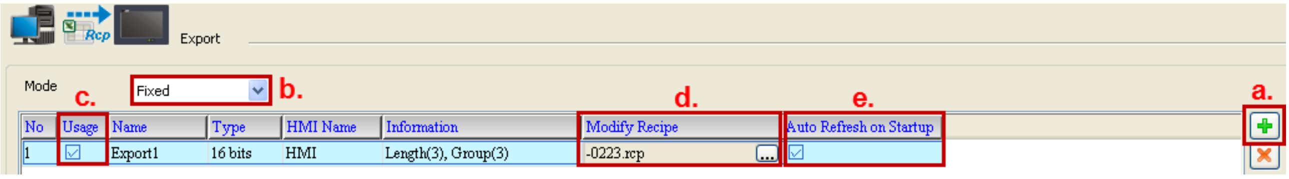
d. Set **Destination Path** (destination location) where the imported file is located.

Please note: the value of the selected -0223.rcp file (item d.) is the downloading value when the element is triggered on HMI.



	A	B	C
1	3	3	
2	111	222	333
3	444	555	666
4	777	888	999

e. Enable Auto Refresh on Startup.



Mode Fixed

No	Usage	Name	Type	HMI Name	Information	Modify Recipe	Auto Refresh on Startup
1	☑	Export1	16 bits	HMI	Length(3), Group(3)	-0223.rcp	☑

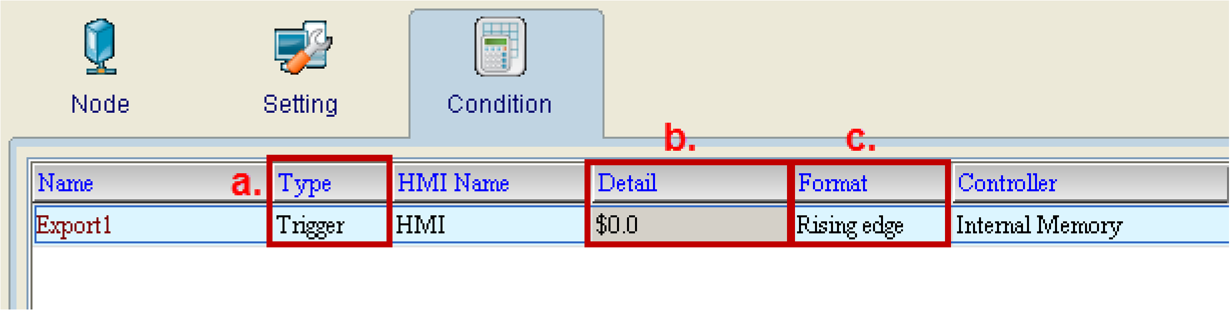
Condition :

As for the method of sampling condition, select **Trigger (Execute sampling when the trigger conditions are satisfied)**.

a. Select **Trigger**.

b. Set **Address** to the register address of the trigger element. (In this case the trigger element is a maintained button element and its address is set to $0.0)

c. Select **Format** as **Rising edge**.



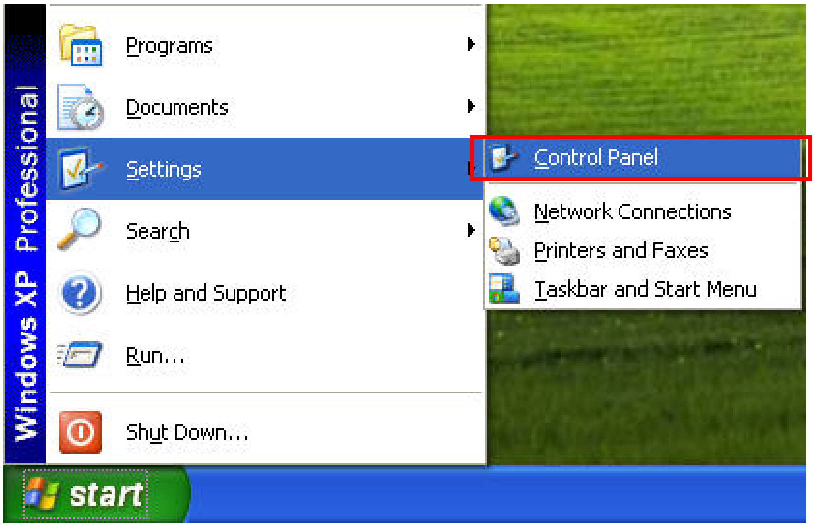
Name	Type	HMI Name	Detail	Format	Controller
Export1	Trigger	HMI	$0.0	Rising edge	Internal Memory

After completing all the settings, please make sure that the IP address numbers of subnet masks of the PC (172.16.190.1) and HMI (172.16.190.100) are the same; otherwise, HMI may not be displayed in the list when finding node.

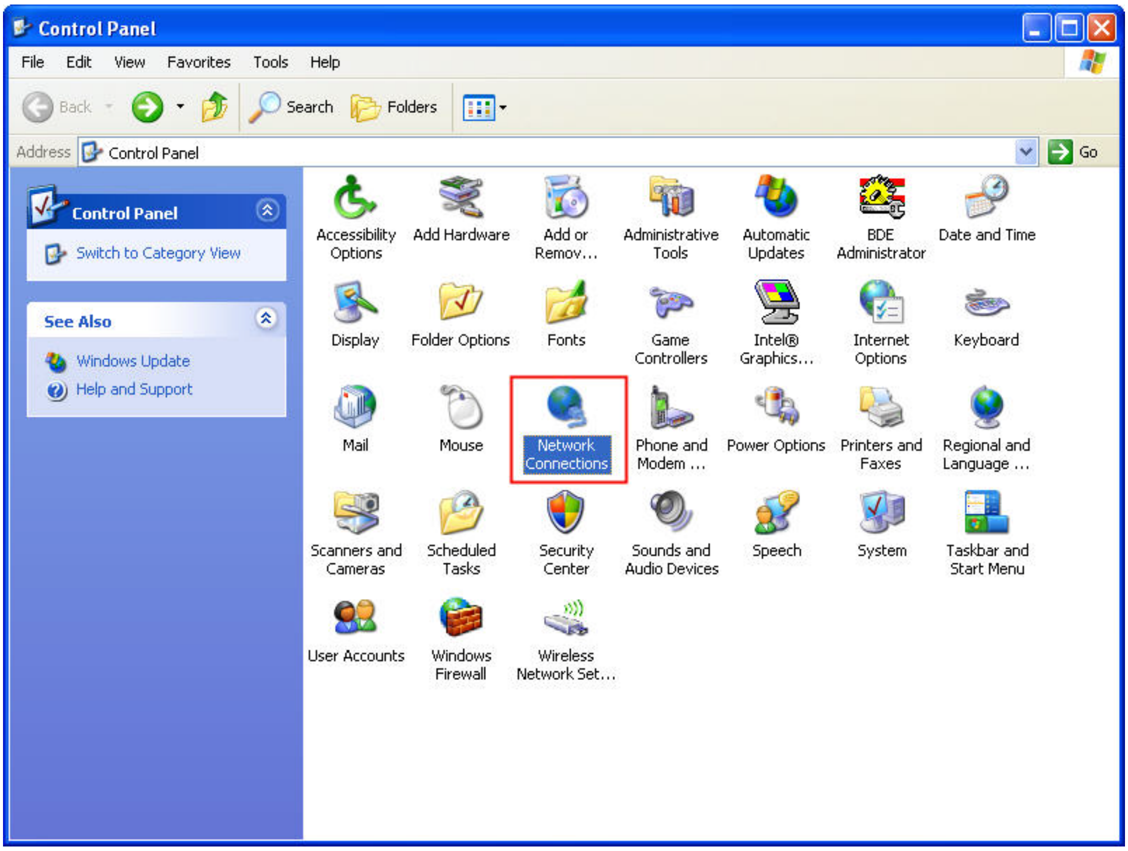
Networking Settings

Ensure to observe the following instructions to complete PC networking settings before eServer operation.

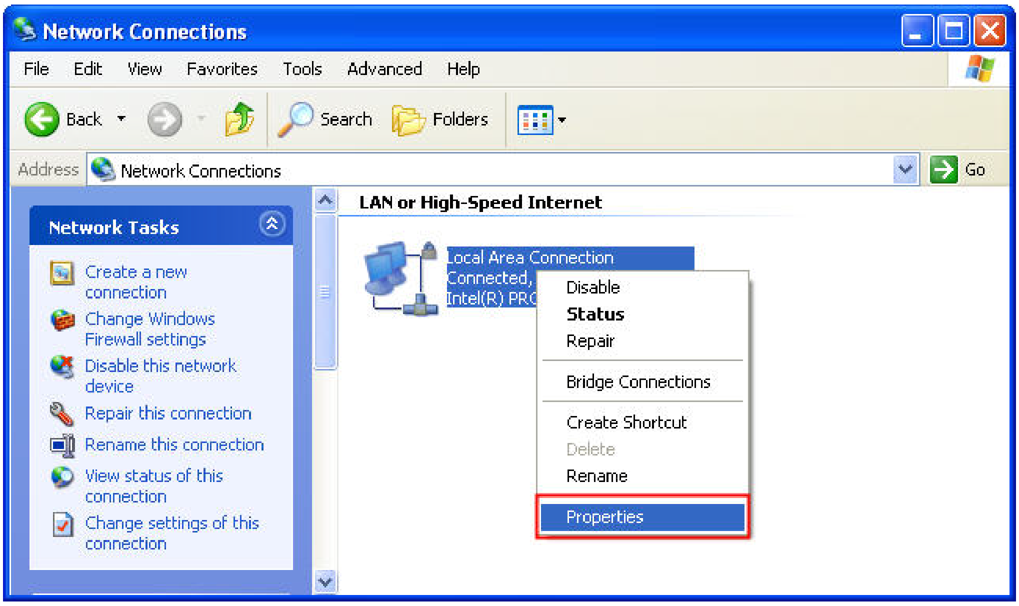
Setting PC Network


Windows XP Professional
Programs
Documents
Settings
Search
Help and Support
Run...
Shut Down...
start
Control Panel
Network Connections
Printers and Faxes
Taskbar and Start Menu

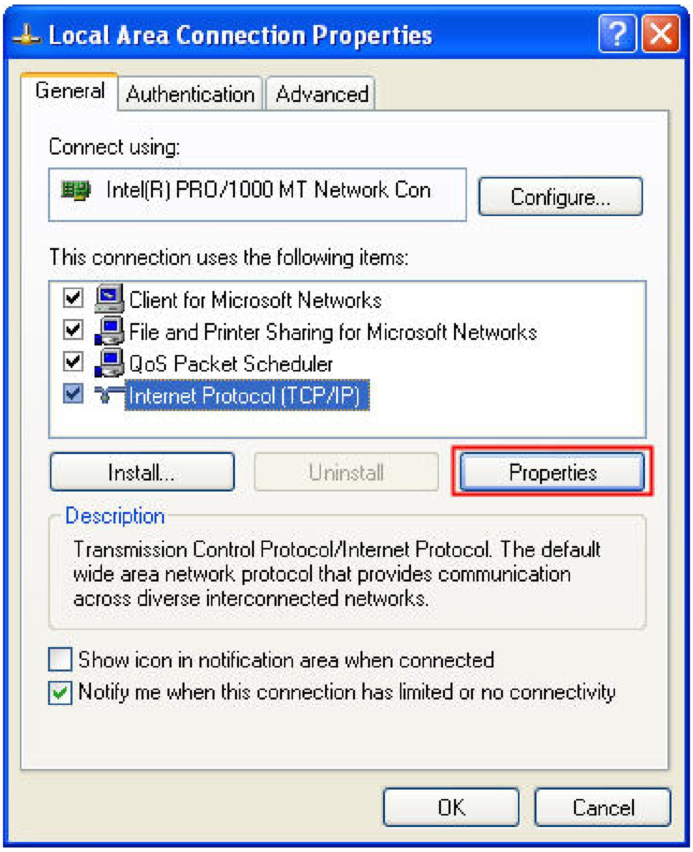
Power on PC and start Windows. Click **Start > Programs**, point to Control Panel, and then select Network Connections (Network Connections).


Control Panel
File Edit View Favorites Tools Help
Back Search Folders
Address Control Panel
Go
Control Panel
Switch to Category View
See Also
Windows Update
Help and Support
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Automatic Updates
BDE Administrator
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel® Graphics...
Internet Options
Keyboard
Mail
Mouse
Network Connections
Phone and Modem ...
Power Options
Printers and Faxes
Regional and Language ...
Scanners and Cameras
Scheduled Tasks
Security Center
Sounds and Audio Devices
Speech
System
Taskbar and Start Menu
User Accounts
Windows Firewall
Wireless Network Set...

Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.


Network Connections
File Edit View Favorites Tools Advanced Help
Back Search Folders
Address Network Connections
Go
Network Tasks
Create a new connection
Change Windows Firewall settings
Disable this network device
Repair this connection
Rename this connection
View status of this connection
Change settings of this connection
LAN or High-Speed Internet
Local Area Connection
Connected,
Intel(R) PRO
Disable
Status
Repair
Bridge Connections
Create Shortcut
Delete
Rename
Properties

The **Local Area Connection Properties** dialog box will open. Use **General** tab to select **Internet Protocol (TCP/IP)**. Then, press **Properties** button.



Local Area Connection Properties

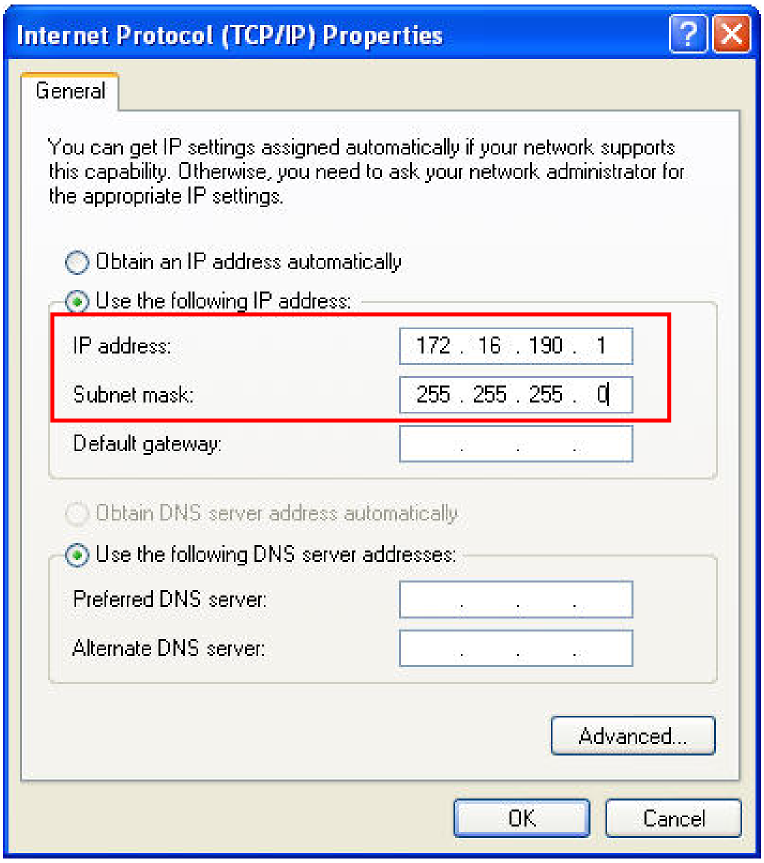
Connect using:
Intel(R) PRO/1000 MT Network Con

This connection uses the following items:
- ☑ Client for Microsoft Networks
- ☑ File and Printer Sharing for Microsoft Networks
- ☑ QoS Packet Scheduler
- ☑ Internet Protocol (TCP/IP)

Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in notification area when connected
☑ Notify me when this connection has limited or no connectivity

The **Internet Protocol (TCP/IP) Properties** dialog box will open. Choose **Use the following IP address** and enter the IP address numbers of the PC into the field of **IP address** and **Subnet mask**.



Internet Protocol (TCP/IP) Properties

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

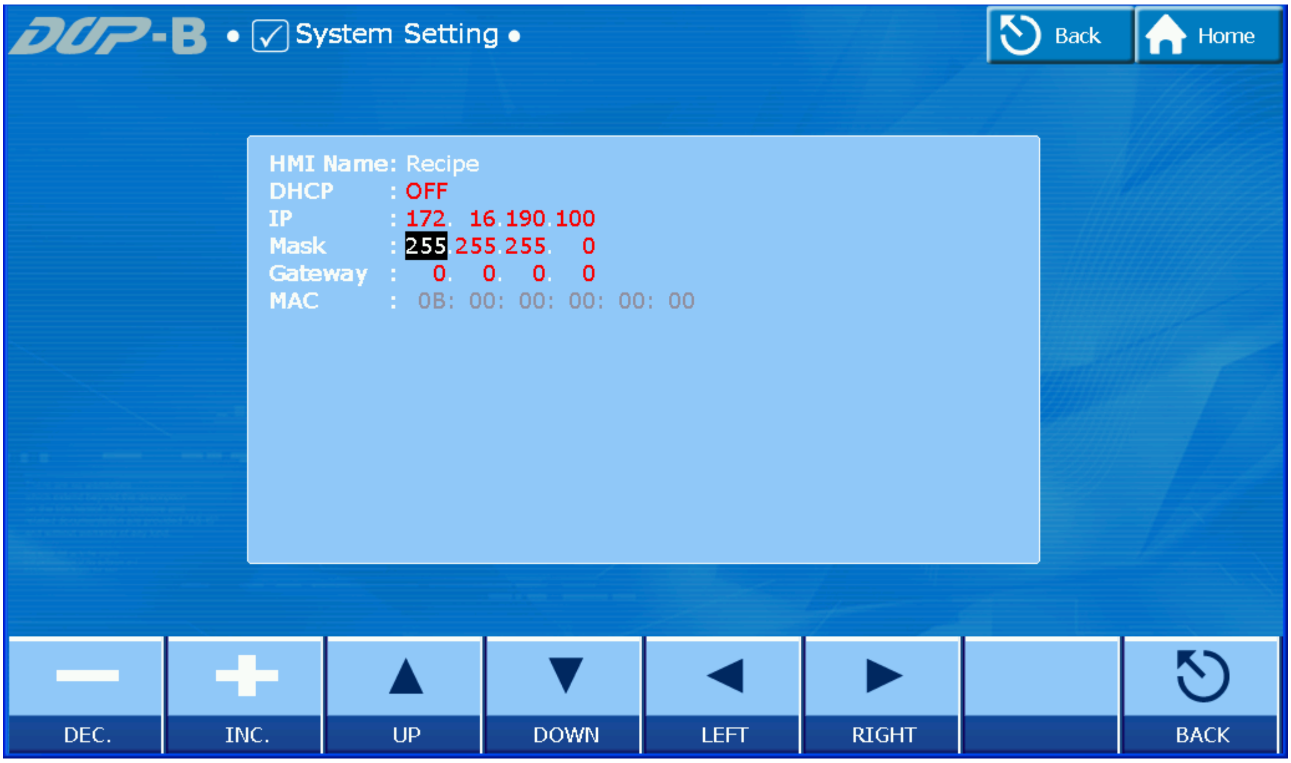
○ Obtain an IP address automatically
● Use the following IP address:
IP address: 172 . 16 . 190 . 1
Subnet mask: 255 . 255 . 255 . 0
Default gateway: . . .

○ Obtain DNS server address automatically
● Use the following DNS server addresses:
Preferred DNS server: . . .
Alternate DNS server: . . .

Then, press **OK** button to finish the settings.

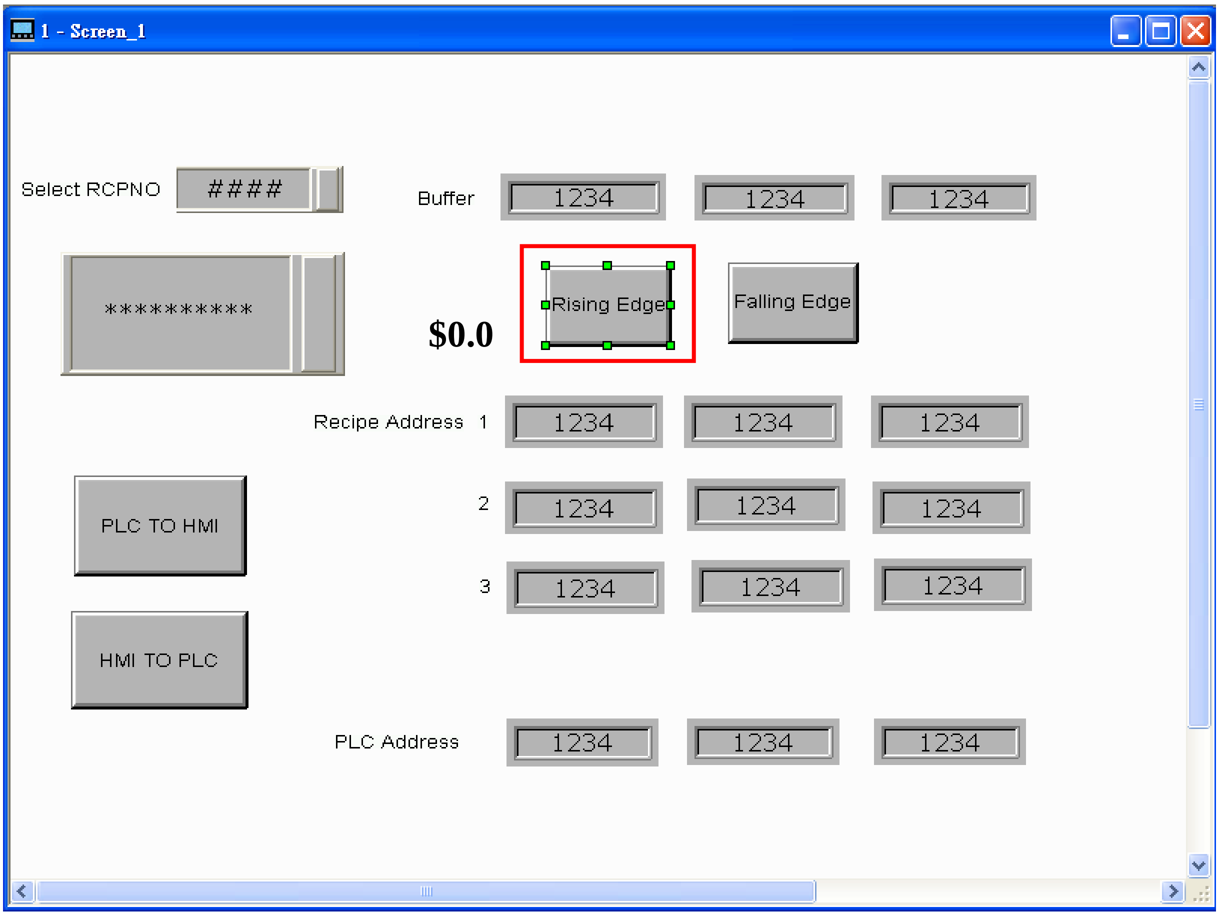
Setting IP Address in HMI

Enter into the system menu and set IP address to 172.16.190.100. Please see the figure below:

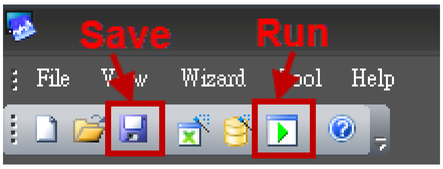

DOP-B
System Setting
Back
Home
DEC.
INC.
UP
DOWN
LEFT
RIGHT
BACK

HMI Name: Recipe
DHCP : OFF
IP : 172. 16.190.100
Mask : 255.255.255. 0
Gateway : 0. 0. 0. 0
MAC : 0B: 00: 00: 00: 00: 00

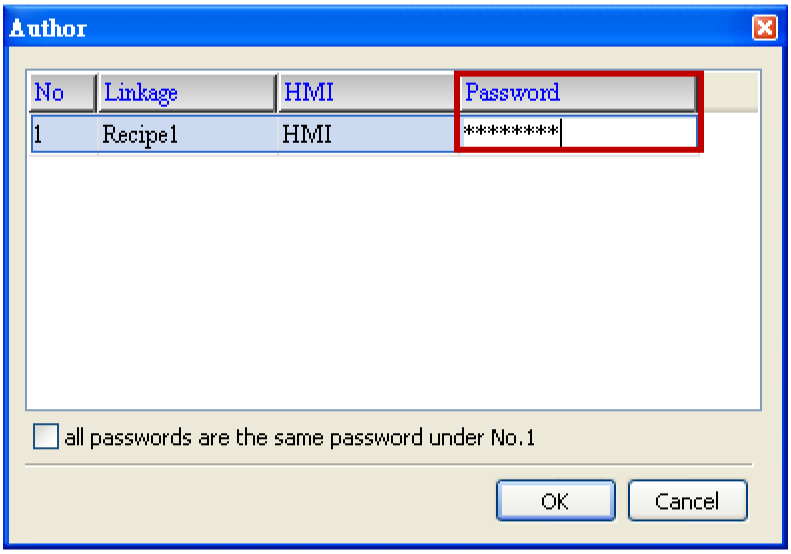
After completing all the settings and make sure that the communication is good, use the most updated DOPSoft program editing software to open the selected .dps file which just has been modified on eServer. Create a maintained button element and set its address to $0.0.


1 - Screen_1
Select RCPNO
####
Buffer
1234
1234
1234
****
$0.0
Rising Edge
Falling Edge
Recipe Address 1
1234
1234
1234
PLC TO HMI
2
1234
1234
1234
3
1234
1234
1234
HMI TO PLC
PLC Address
1234
1234
1234

Then, compile it and download the recipe data to HMI. After recipe data is downloaded to HMI successfully, return to eServer, save the file first and then run the recipe data.


Save
Run
File
View
Wizard
Tool
Help

Press ▶ icon. The following dialog box will pop-up and ask the users to enter the password.


Author

No	Linkage	HMI	Password
1	Recipe1	HMI	*********

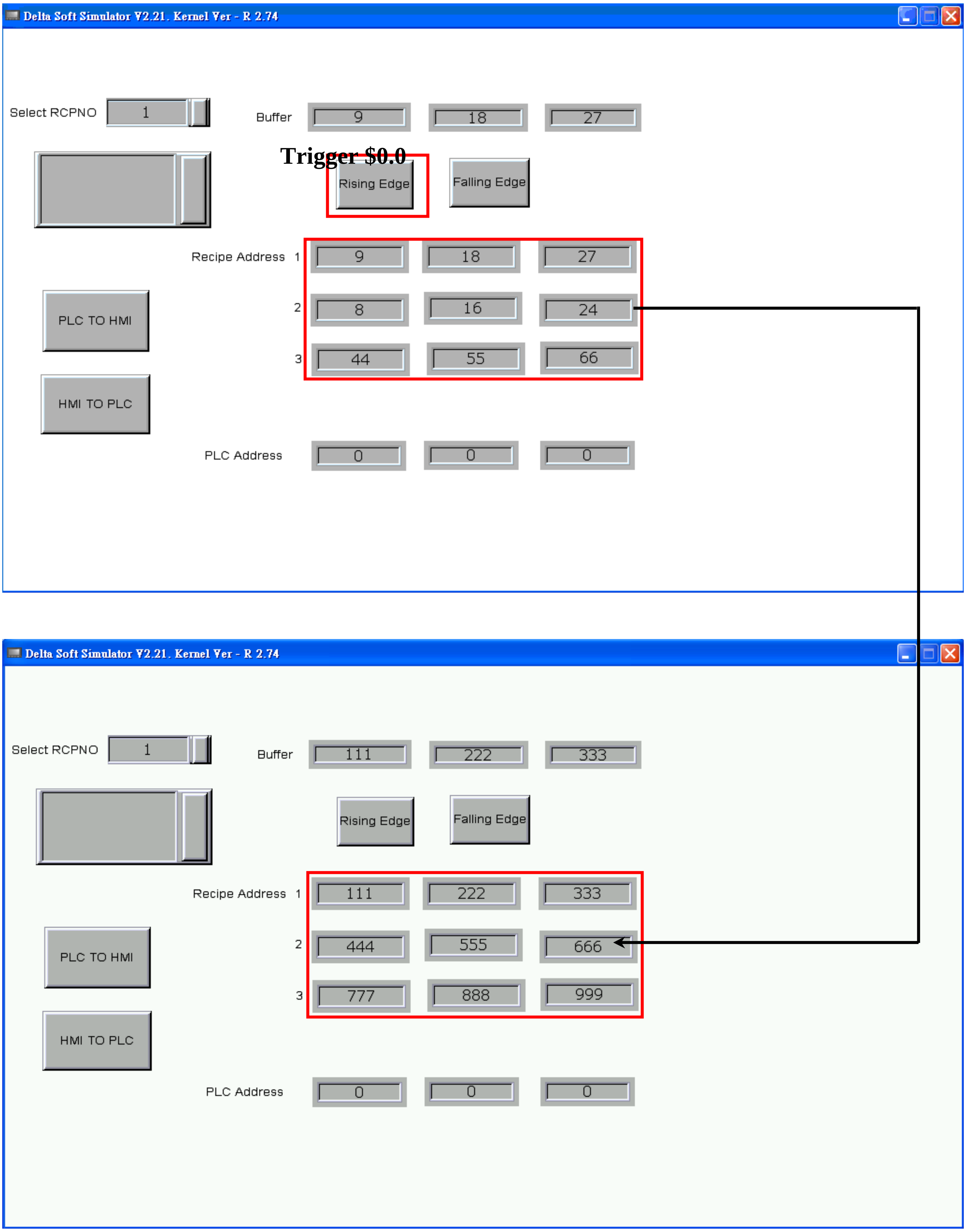
☐ all passwords are the same password under No.1

OK
Cancel

Please enter 12345678 in the filed of the password at the first time (12345678 is the default setting value and the users can change it freely). After the correct password is entered, the icon will display on the tool bar at the left-bottom corner.

When eServer performs reading, due to enable auto refresh on startup, eServer will auto convert recipe value to -0223.rcp recipe value without trigger $0.0, but if disable auto refresh on startup, please trigger the maintained button element on HMI. Then, the system will convert the recipe data to the data of -0223.rcp and show on HMI screen.

Please refer to the figure on next page:


Delta Soft Simulator V2.21. Kernel Ver - R 2.74
Trigger $0.0
Rising Edge
Falling Edge
PLC TO HMI
HMI TO PLC

Select RCPNO 1

Buffer 9 18 27

Recipe Address
1 9 18 27
2 8 16 24
3 44 55 66

PLC Address 0 0 0

Delta Soft Simulator V2.21. Kernel Ver - R 2.74
Rising Edge
Falling Edge
PLC TO HMI
HMI TO PLC

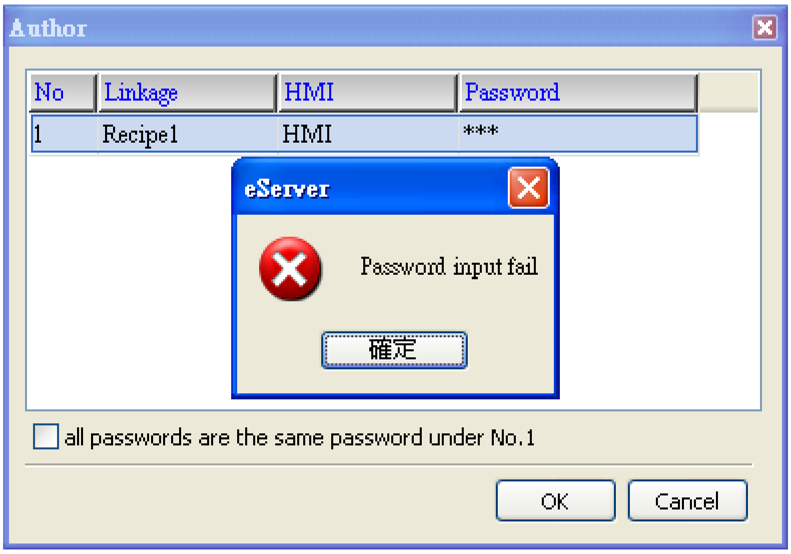
Select RCPNO 1

Buffer 111 222 333

Recipe Address
1 111 222 333
2 444 555 666
3 777 888 999

PLC Address 0 0 0

On the other hand, if incorrect or invalid password is entered, the following error message dialog box will appear to alert the users.



No	Linkage	HMI	Password
1	Recipe1	HMI	***

Password input fail

☐ all passwords are the same password under No.1

Export - Variance

Setting :

a. Select **Variance**.

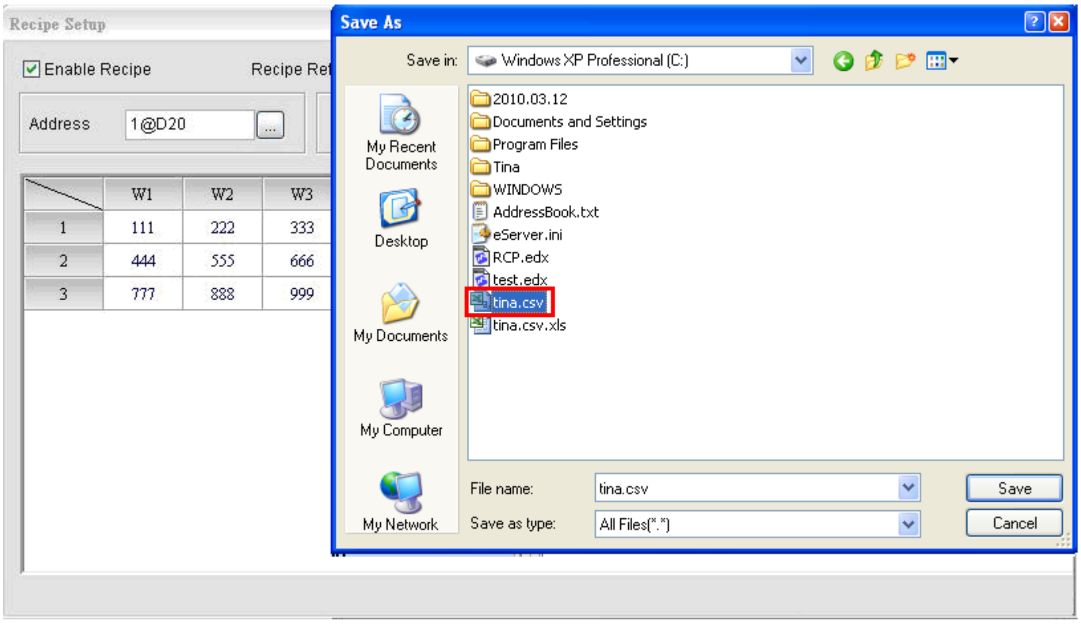
b. Check the check box to use **16-bit recipe** as the example.

c. Set the **File Name** (file name of the imported file) to be the same as the register address of HMI. (In this case **$100** character input element is used.)

d. Set **File Name Length** (number of the imported characters). (In this case the File Name Length is set to 4. This is because the name of the exported file is **Tina.csv**. This file will be open in Screen Editor and save the value into .csv file.)

e. Set **Source Path** (destination location) where the exported file is located (Tina.csv file is saved in **C:\**).

f. Enable Auto Refresh on Startup


Recipe Setup
☑ Enable Recipe
Recipe Ref
Save As
Save in:
My Recent Documents
Desktop
My Documents
My Computer
My Network
2010.03.12
Documents and Settings
Program Files
Tina
WINDOWS
AddressBook.txt
eServer.ini
RCP.edx
test.edx
tina.csv
tina.csv.xls
Save
Cancel

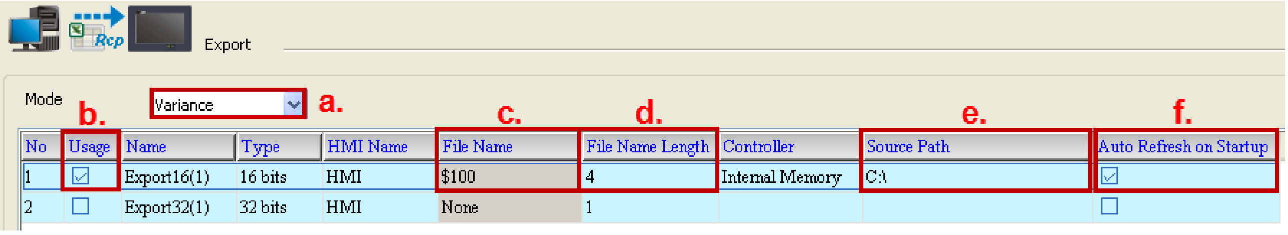
Address: 1@D20

	W1	W2	W3
1	111	222	333
2	444	555	666
3	777	888	999

Save in: Windows XP Professional (C:)

File name: tina.csv

Save as type: All Files(*.*)


Rcp
Export
a.
b.
c.
d.
e.
f.

Mode: Variance

No	Usage	Name	Type	HMI Name	File Name	File Name Length	Controller	Source Path	Auto Refresh on Startup
1	☑	Export16(1)	16 bits	HMI	$100	4	Internal Memory	C:\	☑
2	☐	Export32(1)	32 bits	HMI	None	1			☐

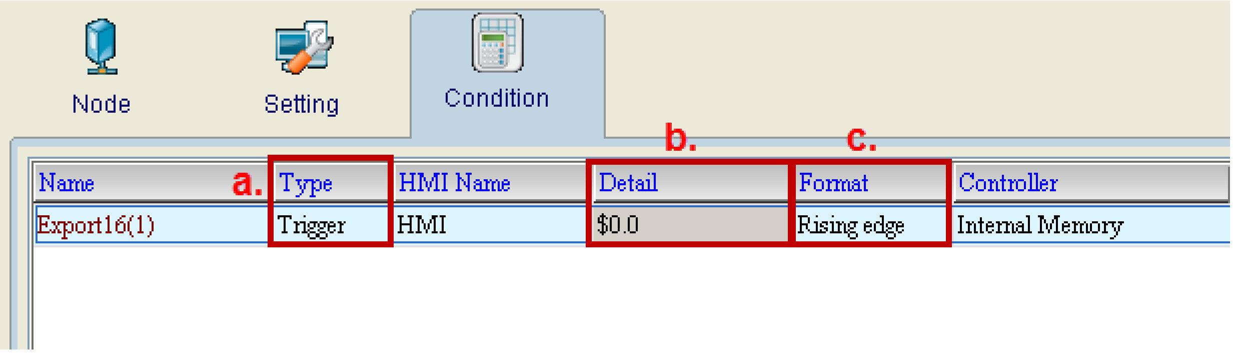
Condition :

As for the method of sampling condition, select **Trigger (Execute sampling when the trigger conditions are satisfied)**.

a. Select **Trigger**.

b. Set **Address** to the register address of the trigger element. (In this case the trigger element is a maintained button element and its address is set to **$0.0**)

c. Select **Format** as **Rising edge**.


Node
Setting
Condition
a.
b.
c.

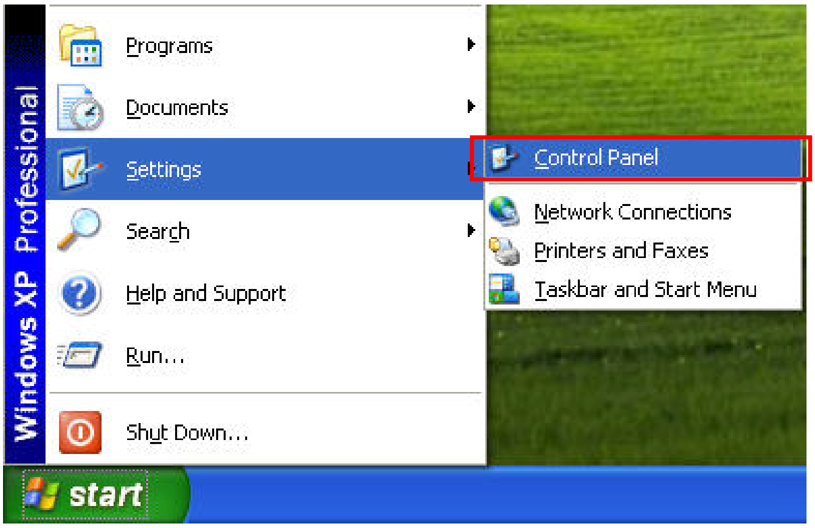
Name	Type	HMI Name	Detail	Format	Controller
Export16(1)	Trigger	HMI	$0.0	Rising edge	Internal Memory

After completing all the settings, please make sure that the IP address numbers of subnet masks of the PC (172.16.190.1) and HMI (172.16.190.100) are the same; otherwise, HMI may not be displayed in the list when finding node.

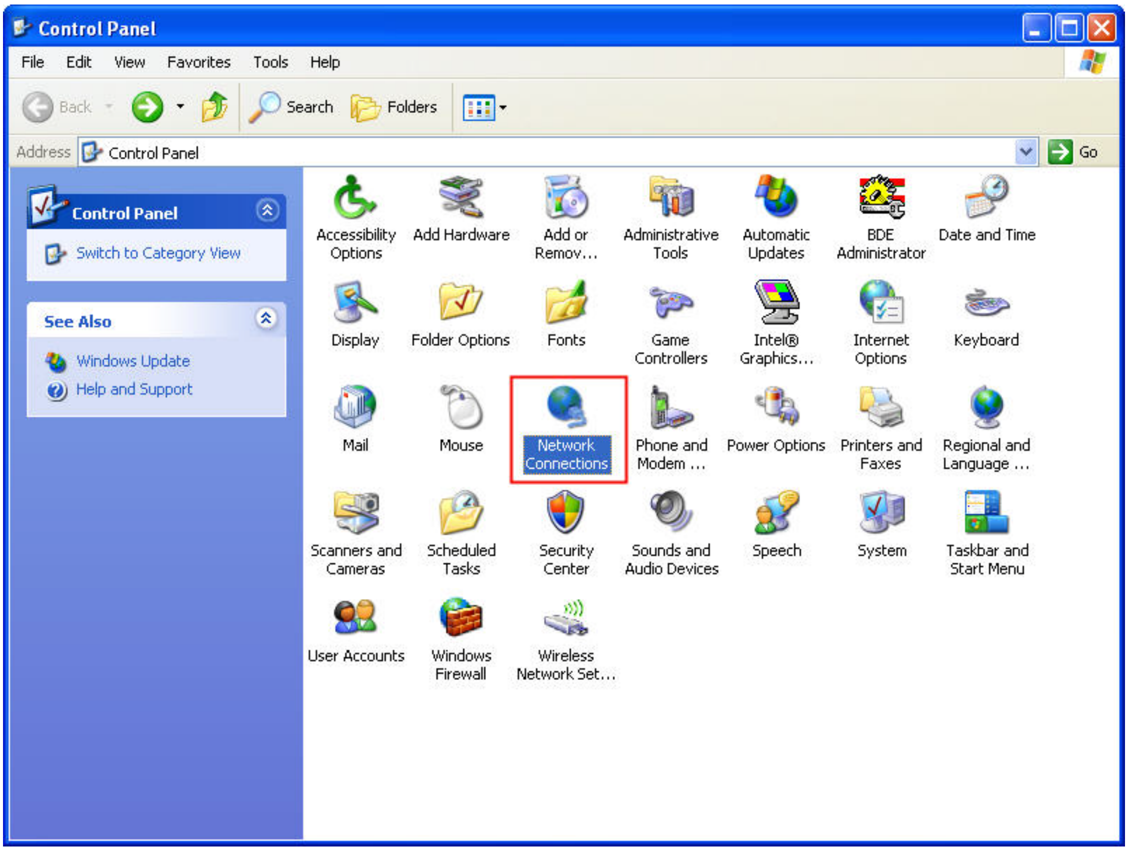
Networking Settings

Ensure to observe the following instructions to complete PC networking settings before eServer operation.

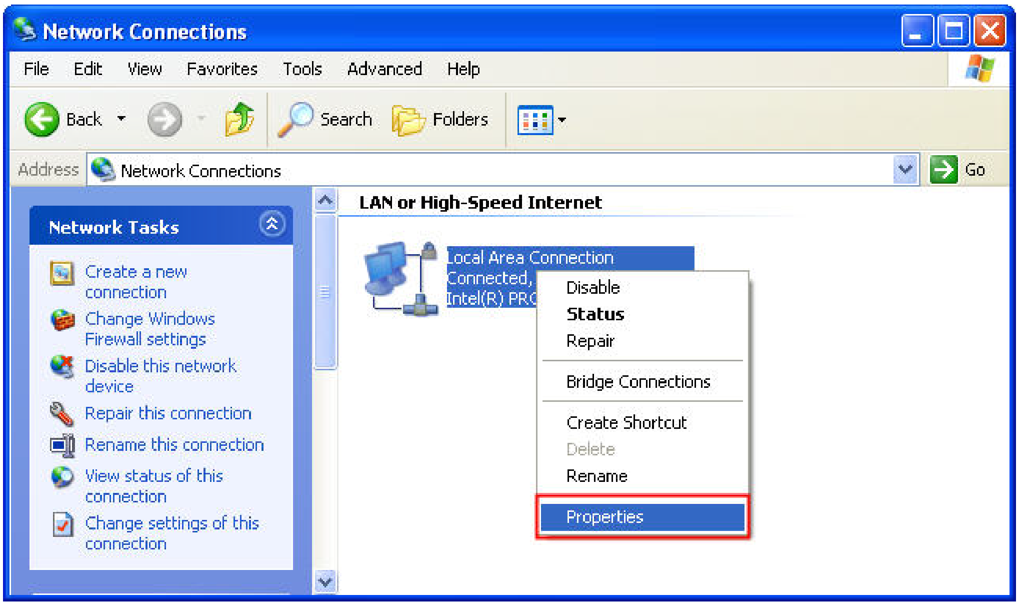
Setting PC Network


Windows XP Professional
Programs
Documents
Settings
Search
Help and Support
Run...
Shut Down...
start
Control Panel
Network Connections
Printers and Faxes
Taskbar and Start Menu

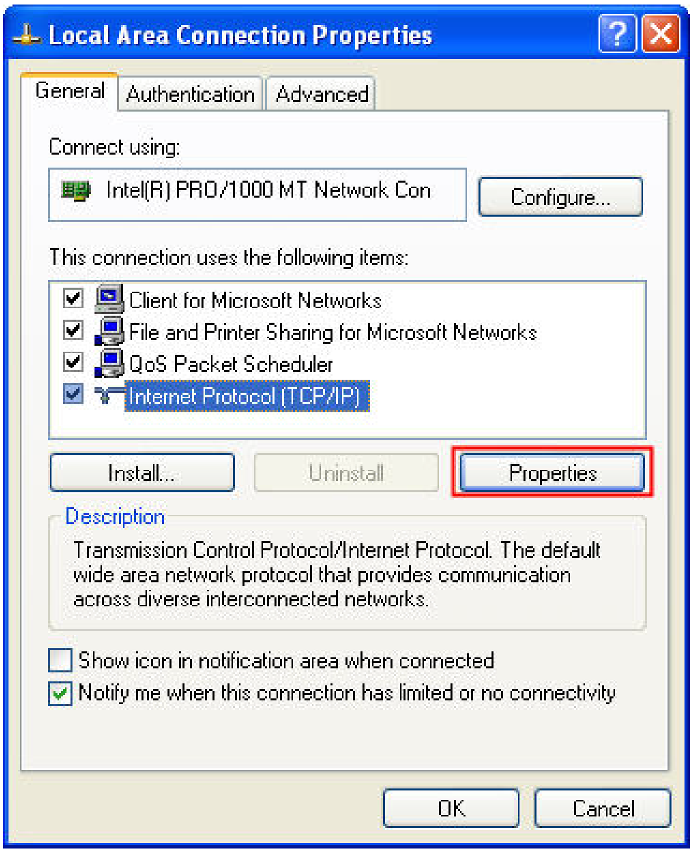
Power on PC and start Windows. Click **Start > Programs**, point to Control Panel, and then select Network Connections (Network Connections).


Control Panel
File Edit View Favorites Tools Help
Back Search Folders
Address Control Panel
Go
Control Panel
Switch to Category View
See Also
Windows Update
Help and Support
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Automatic Updates
BDE Administrator
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel® Graphics...
Internet Options
Keyboard
Mail
Mouse
Network Connections
Phone and Modem ...
Power Options
Printers and Faxes
Regional and Language ...
Scanners and Cameras
Scheduled Tasks
Security Center
Sounds and Audio Devices
Speech
System
Taskbar and Start Menu
User Accounts
Windows Firewall
Wireless Network Set...

Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.


Network Connections
File
Edit
View
Favorites
Tools
Advanced
Help
Back
Search
Folders
Address
Network Connections
Go
Network Tasks
Create a new connection
Change Windows Firewall settings
Disable this network device
Repair this connection
Rename this connection
View status of this connection
Change settings of this connection
LAN or High-Speed Internet
Local Area Connection
Connected,
Intel(R) PRO
Disable
Status
Repair
Bridge Connections
Create Shortcut
Delete
Rename
Properties

The **Local Area Connection Properties** dialog box will open. Use **General** tab to select **Internet Protocol (TCP/IP)**. Then, press **Properties** button.


Local Area Connection Properties
General
Authentication
Advanced
Configure...
Install...
Uninstall
Properties
OK
Cancel

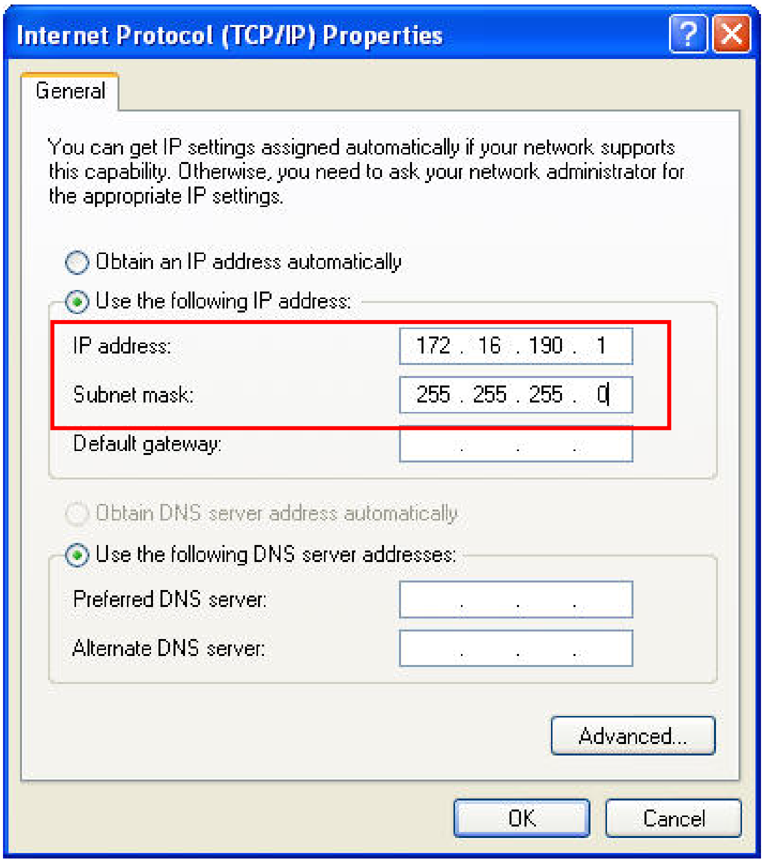
Connect using:
Intel(R) PRO/1000 MT Network Con

This connection uses the following items:
☑ Client for Microsoft Networks
☑ File and Printer Sharing for Microsoft Networks
☑ QoS Packet Scheduler
☑ Internet Protocol (TCP/IP)

Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in notification area when connected
☑ Notify me when this connection has limited or no connectivity

The **Internet Protocol (TCP/IP) Properties** dialog box will open. Choose **Use the following IP address** and enter the IP address numbers of the PC into the field of **IP address** and **Subnet mask**.


Internet Protocol (TCP/IP) Properties
General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically

● Use the following IP address:

IP address: 172 . 16 . 190 . 1

Subnet mask: 255 . 255 . 255 . 0

Default gateway: . . .

○ Obtain DNS server address automatically

● Use the following DNS server addresses:

Preferred DNS server: . . .

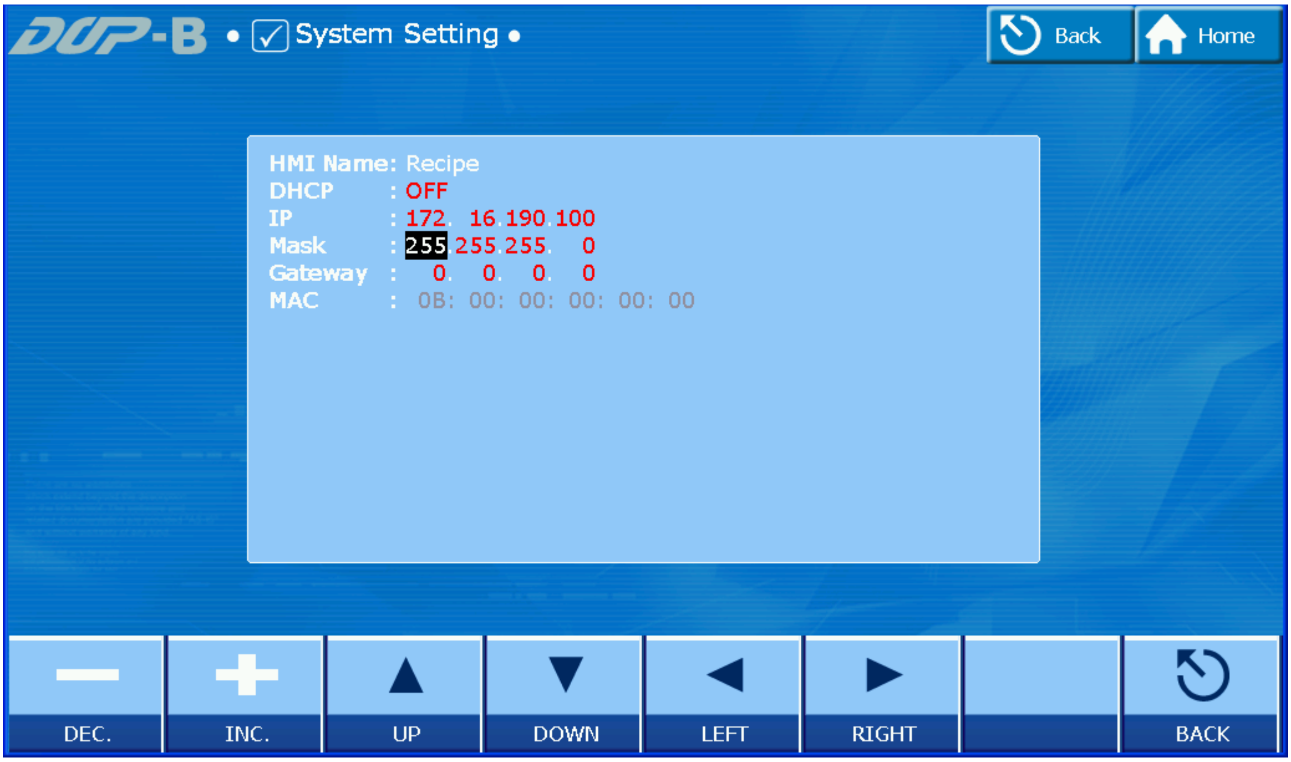
Alternate DNS server: . . .

Advanced...
OK
Cancel

Then, press **OK** button to finish the settings.

Setting IP Address in HMI

Enter into the system menu and set IP address to 172.16.190.100. Please see the figure below:


DOP-B
System Setting
Back
Home

HMI Name: Recipe

DHCP : OFF

IP : 172. 16.190.100

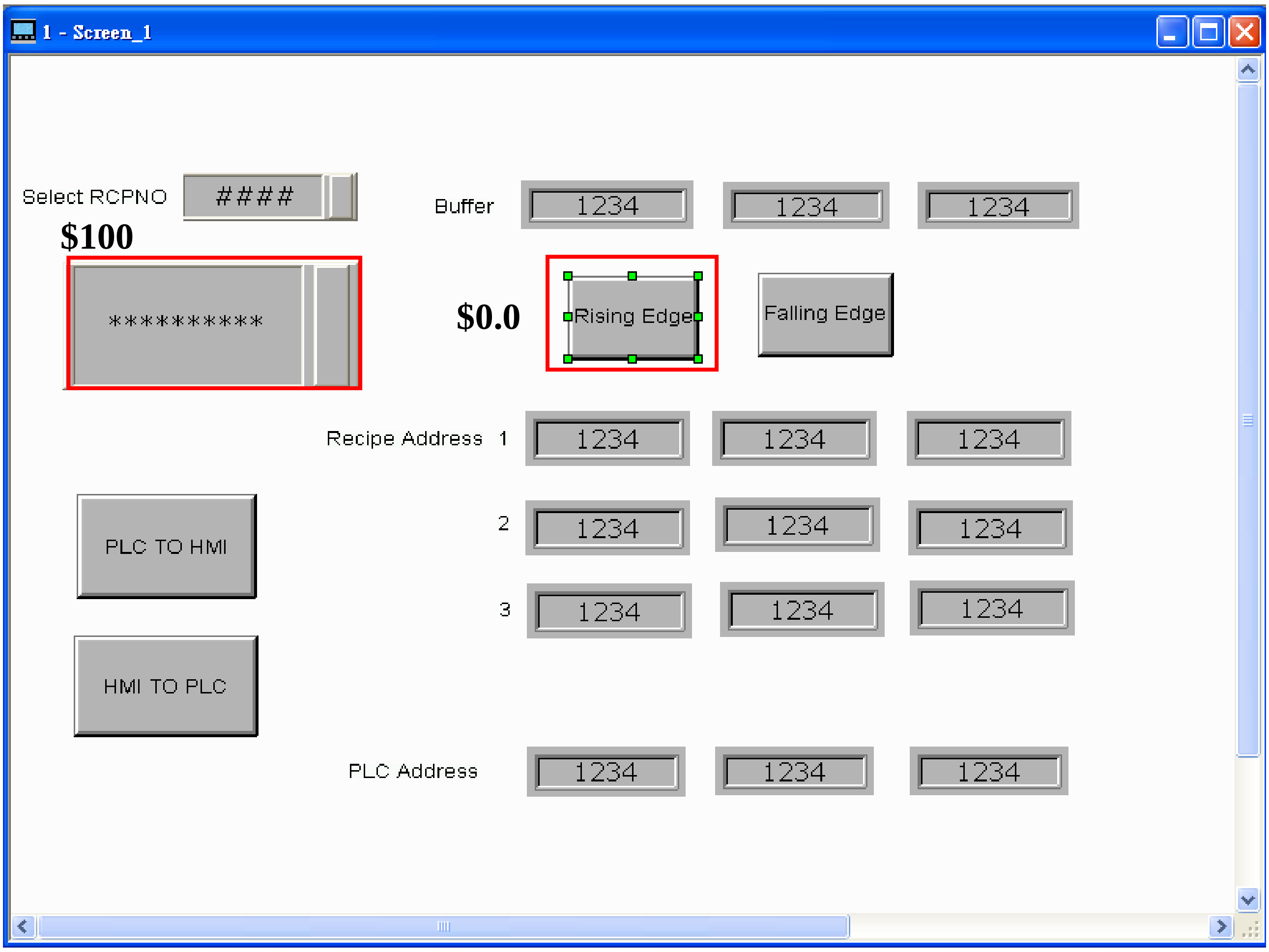
Mask : 255.255.255. 0

Gateway : 0. 0. 0. 0

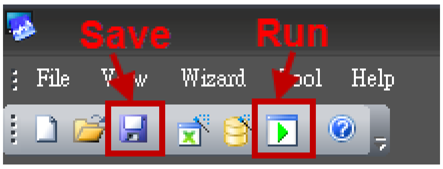
MAC : 0B: 00: 00: 00: 00: 00

DEC.
INC.
UP
DOWN
LEFT
RIGHT
BACK

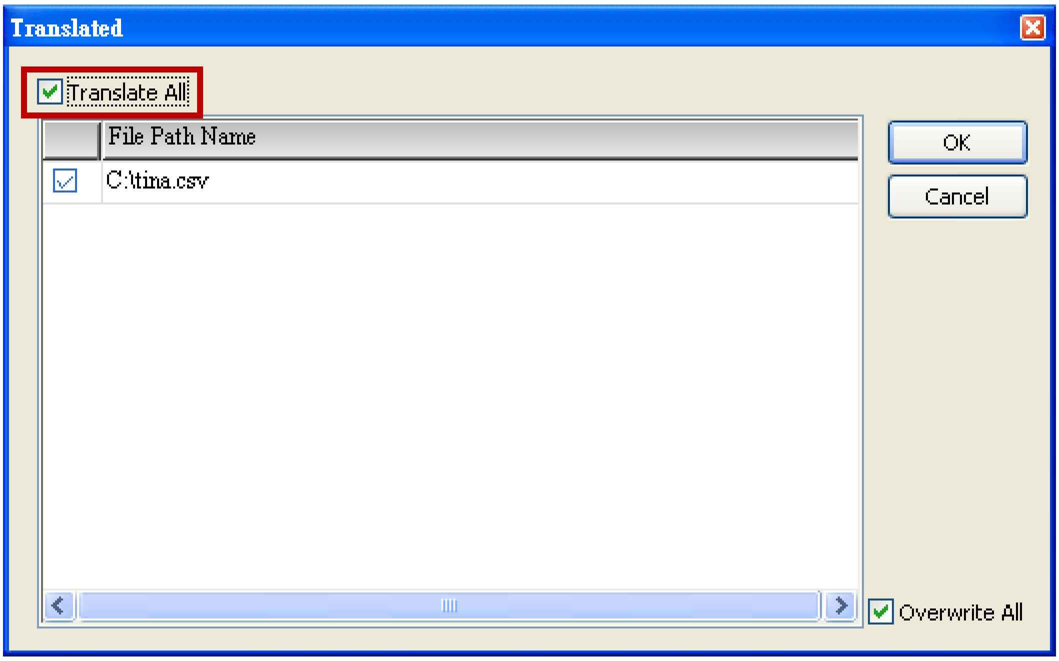
After completing all the settings and make sure that the communication is good, use the most updated DOPSoft program editing software to open the selected .dps file which just has been modified on eServer. Then, create two elements. One is a character input element and its address is set to $100. The other is a maintained button element and its address is set to $0.0. Please refer to the figure below:


1 - Screen_1
Select RCPNO
####
$100
****
Buffer
1234
1234
1234
$0.0
Rising Edge
Falling Edge
Recipe Address 1
1234
1234
1234
2
1234
1234
1234
3
1234
1234
1234
PLC TO HMI
HMI TO PLC
PLC Address
1234
1234
1234

Then, compile it and download the recipe data to HMI. After recipe data is downloaded to HMI successfully, trigger the numeric input element ($100) and input TINA on HMI, then return to eServer, save the file first and then run the recipe data.


Save
Run
File
View
Wizard
Tool
Help

Press ▷ icon. The following dialog box will pop-up and ask the users if it is necessary to convert the file of Tina.csv.

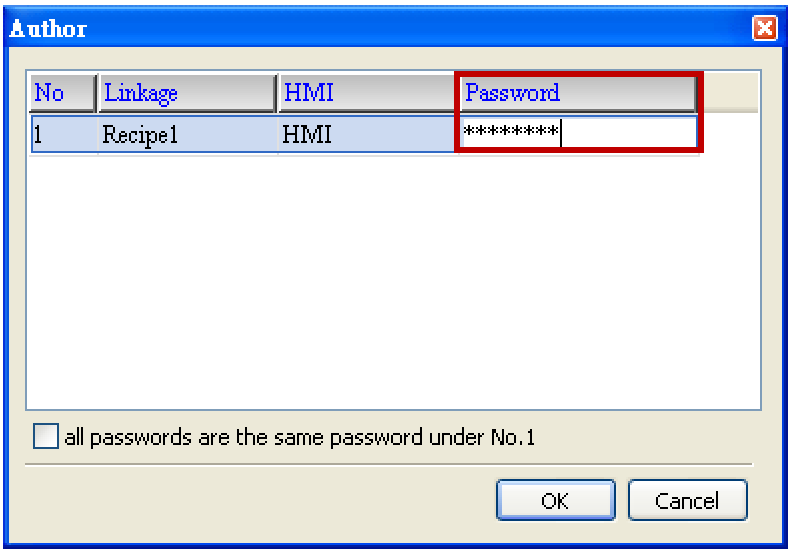


☑ Translate All

	File Path Name
☑	C:\tina.csv

☑ Overwrite All

Check the box before **Translate All** and press **OK** button, the following dialog box will pop-up and ask the users to enter the password.



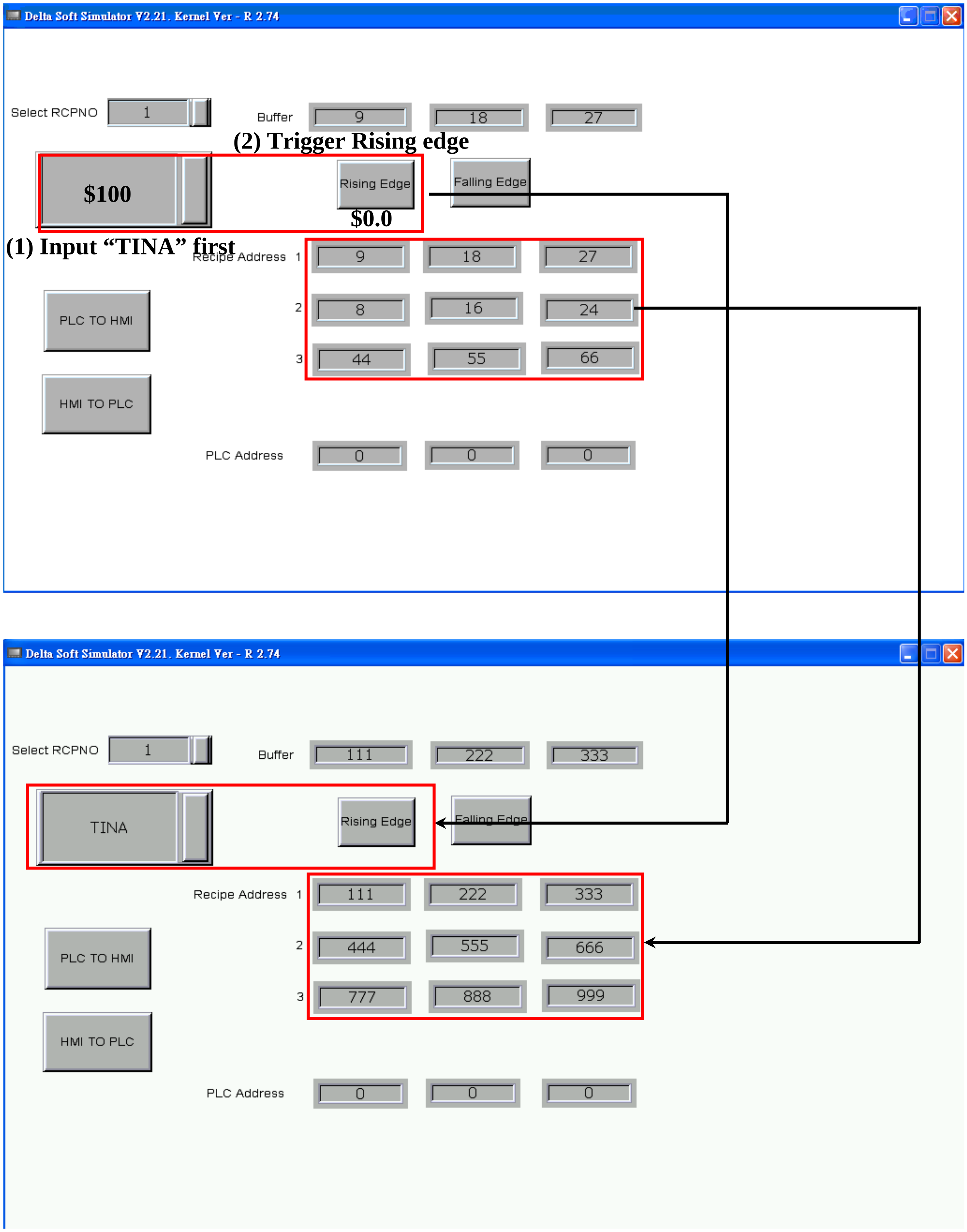
No	Linkage	HMI	Password
1	Recipe1	HMI	********

☐ all passwords are the same password under No.1

Please enter 12345678 in the filed of the password at the first time (12345678 is the default setting value and the users can change it freely). After the correct password is entered, the icon will display on the tool bar at the left-bottom corner.

When eServer performs reading, due to enable auto refresh on startup, eServer will auto convert the recipe to Tina.csv recipe value, but if disable auto refresh on startup, please trigger the character input element ($100) and input TINA then trigger the maintained button element ($0.0) on HMI. Then, the system will convert the recipe data to the record data of Tina.csv file.

Please refer to the figure on next page:


Delta Soft Simulator V2.21. Kernel Ver - R 2.74
(2) Trigger Rising edge
$100
Rising Edge
Falling Edge
$0.0
(1) Input “TINA” first
PLC TO HMI
HMI TO PLC
Delta Soft Simulator V2.21. Kernel Ver - R 2.74
Rising Edge
Falling Edge
PLC TO HMI
HMI TO PLC

Select RCPNO 1

Buffer 9 18 27

Recipe Address 1: 9 18 27

2: 8 16 24

3: 44 55 66

PLC Address 0 0 0

Select RCPNO 1

Buffer 111 222 333

TINA

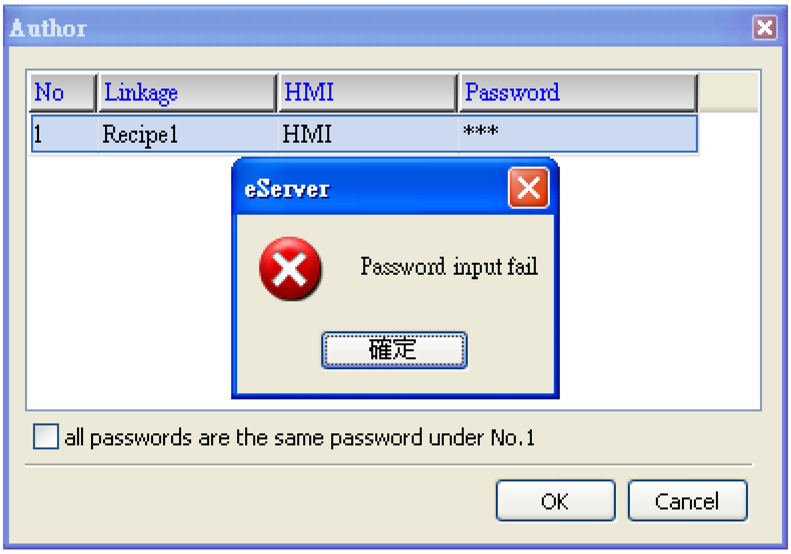
Recipe Address 1: 111 222 333

2: 444 555 666

3: 777 888 999

PLC Address 0 0 0

On the other hand, if incorrect or invalid password is entered, the following error message dialog box will appear to alert the users.



No	Linkage	HMI	Password
1	Recipe1	HMI	***

Password input fail

Author
eServer
確定
☐ all passwords are the same password under No.1
OK
Cancel

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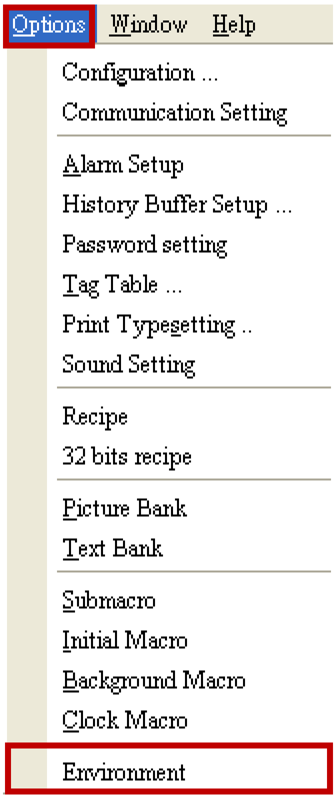
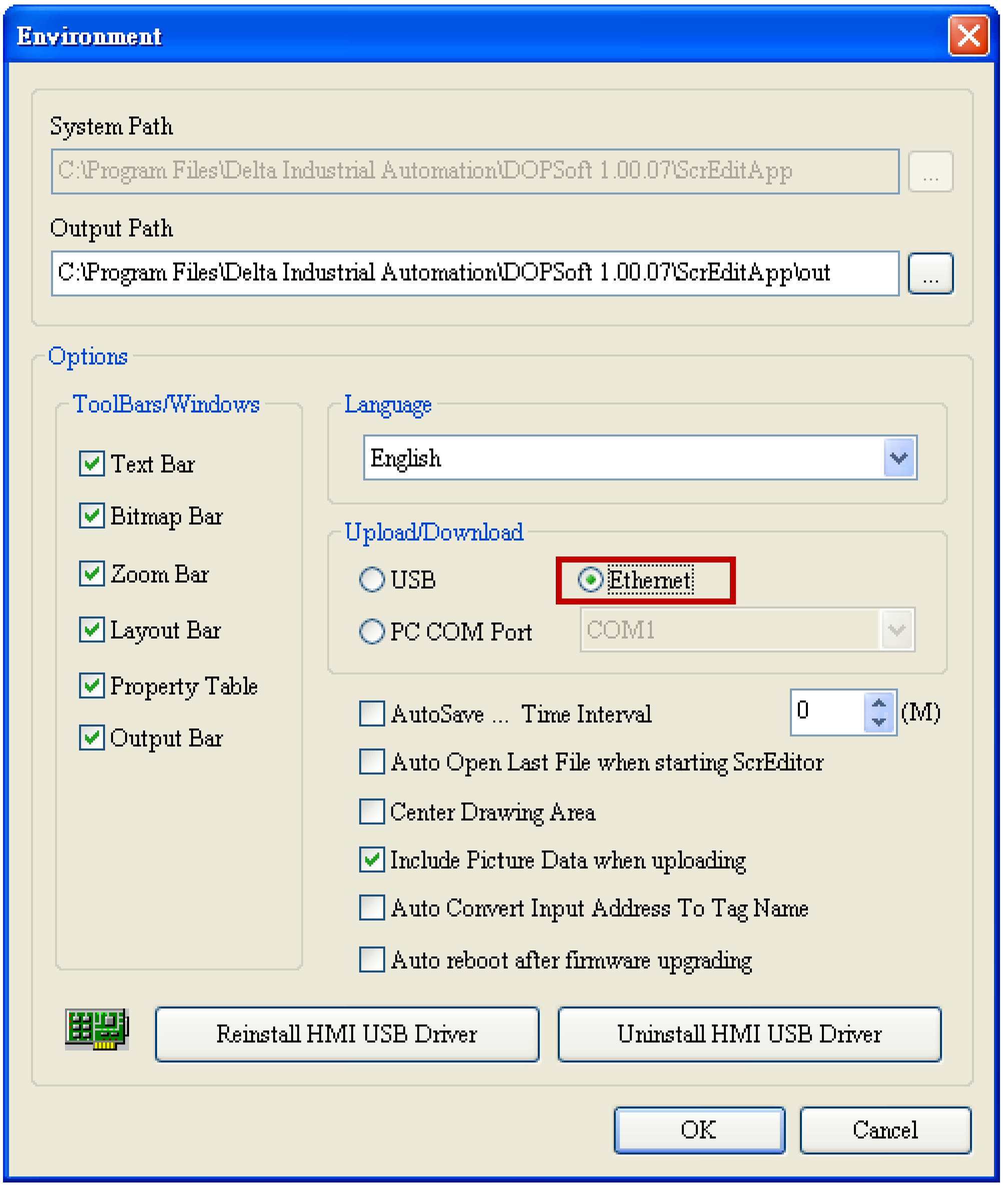
Appendix A Upload / Download via Ethernet

A.1 Environment Settings

The default setting of upload and download on DOPSoft is via **USB**. If the users need to use **Ethernet**, please activate DOPSoft and select **Options > Environment** to access the configuration options and change the upload and download setting.


Options
Window
Help
Configuration ...
Communication Setting
Alarm Setup
History Buffer Setup ...
Password setting
Tag Table ...
Print Typesetting ..
Sound Setting
Recipe
32 bits recipe
Picture Bank
Text Bank
Submacro
Initial Macro
Background Macro
Clock Macro
Environment

In **Environment** dialog box, change the default setting of upload and download to **Ethernet**. Then, press **OK** to complete the setting.



Environment

System Path: C:\Program Files\Delta Industrial Automation\DOPSoft 1.00.07\ScrEditApp

Output Path: C:\Program Files\Delta Industrial Automation\DOPSoft 1.00.07\ScrEditApp\out

Options

ToolBars/Windows
- ☑ Text Bar
- ☑ Bitmap Bar
- ☑ Zoom Bar
- ☑ Layout Bar
- ☑ Property Table
- ☑ Output Bar

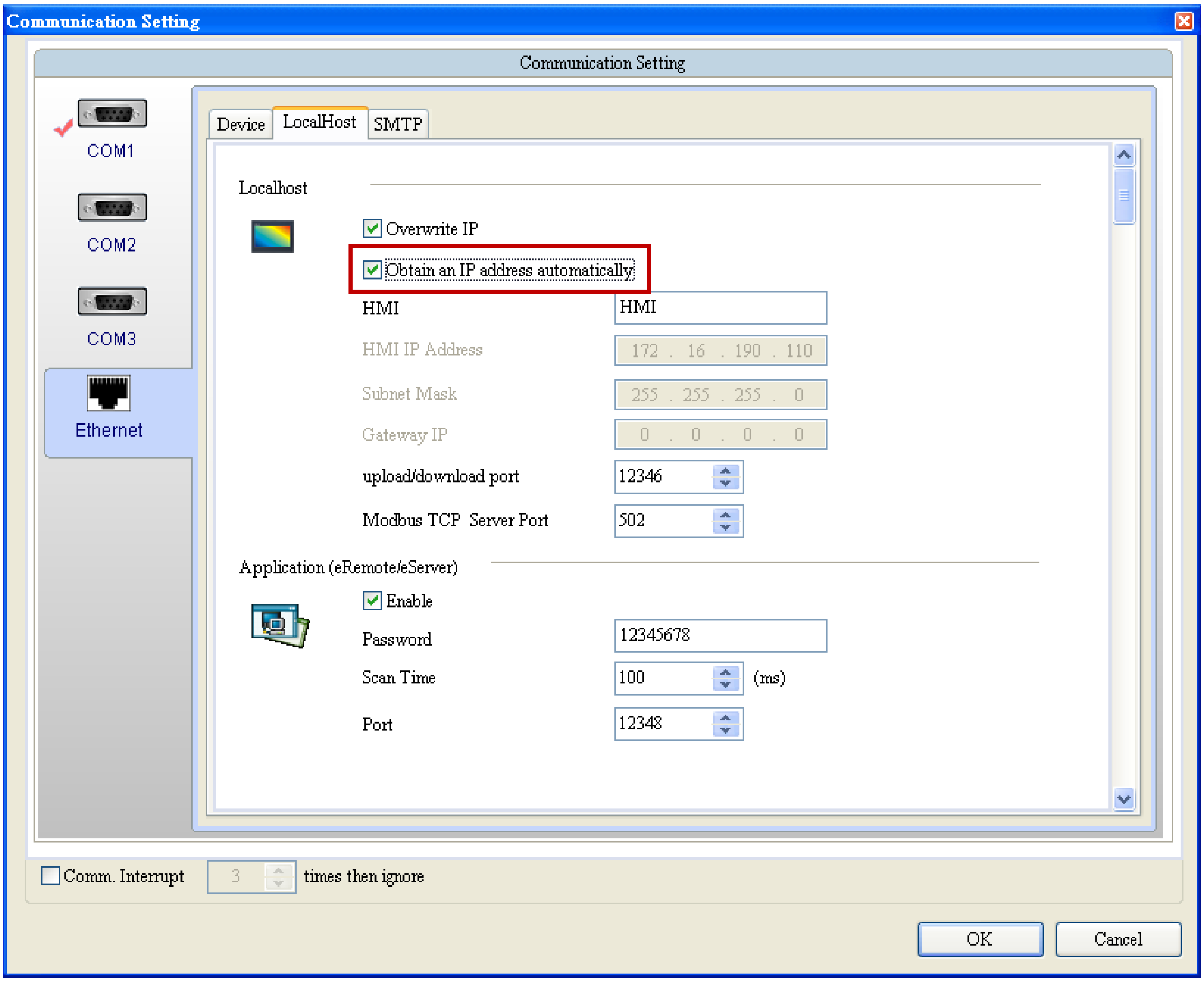
Language: English

Upload/Download
- ○ USB
- ● Ethernet
- ○ PC COM Port COM1

- ☐ AutoSave ... Time Interval 0 (M)
- ☐ Auto Open Last File when starting ScrEditor
- ☐ Center Drawing Area
- ☑ Include Picture Data when uploading
- ☐ Auto Convert Input Address To Tag Name
- ☐ Auto reboot after firmware upgrading

A.2 Communication Setting

If the users choose to use DHCP mode, please into **Options** > **Communication Setting** > **Ethernet** > **LocalHost** to enable **Obtain an IP address automatically**.


Communication Setting
Communication Setting
COM1
COM2
COM3
Ethernet
Device
LocalHost
SMTP
OK
Cancel

Localhost

☑ Overwrite IP

☑ Obtain an IP address automatically

HMI	HMI
HMI IP Address	172 . 16 . 190 . 110
Subnet Mask	255 . 255 . 255 . 0
Gateway IP	0 . 0 . 0 . 0
upload/download port	12346
Modbus TCP Server Port	502

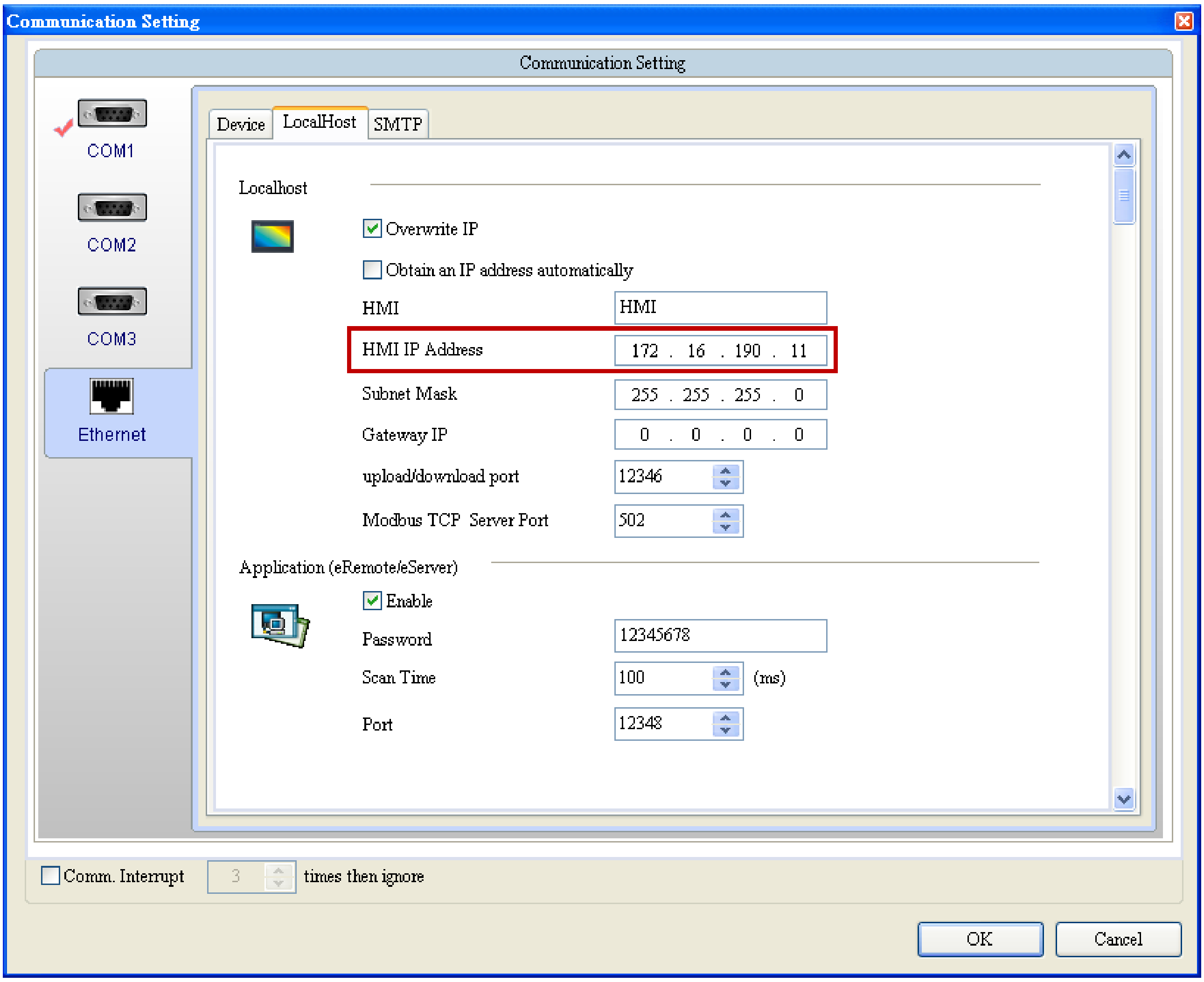
Application (eRemote/eServer)

☑ Enable

Password	12345678
Scan Time	100 (ms)
Port	12348

☐ Comm. Interrupt 3 times then ignore

If the users choose to use user-defined IP address, please into **Options** > **Communication Settings** > **Ethernet** > **LocalHost** and set HMI IP Address then ensure that the domain name is the same as the IP address of the personal computer.


Communication Setting
COM1
COM2
COM3
Ethernet
Device
LocalHost
SMTP
OK
Cancel

Localhost

☑ Overwrite IP

☐ Obtain an IP address automatically

HMI: HMI

HMI IP Address: 172 . 16 . 190 . 11

Subnet Mask: 255 . 255 . 255 . 0

Gateway IP: 0 . 0 . 0 . 0

upload/download port: 12346

Modbus TCP Server Port: 502

Application (eRemote/eServer)

☑ Enable

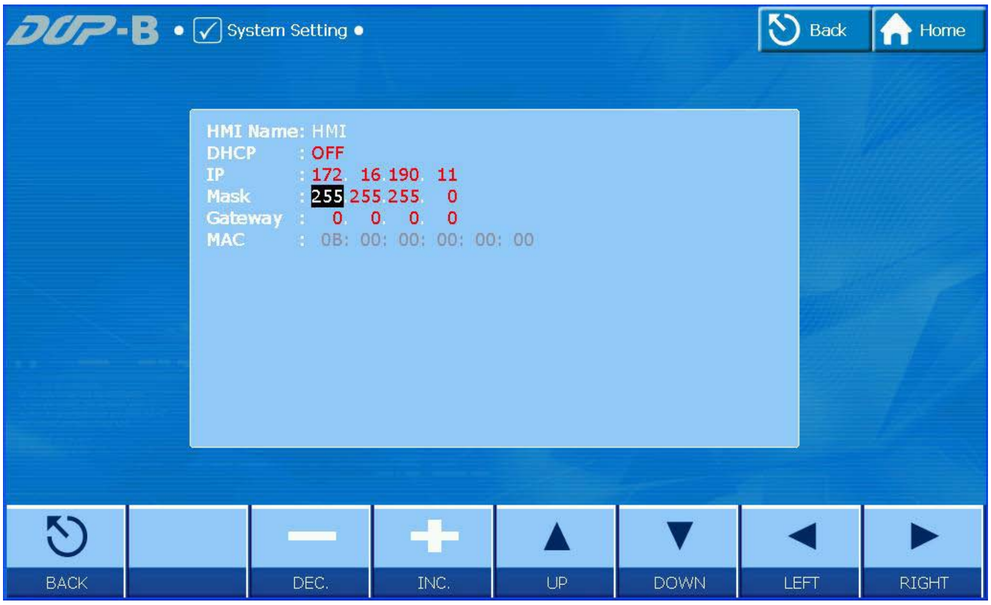
Password: 12345678

Scan Time: 100 (ms)

Port: 12348

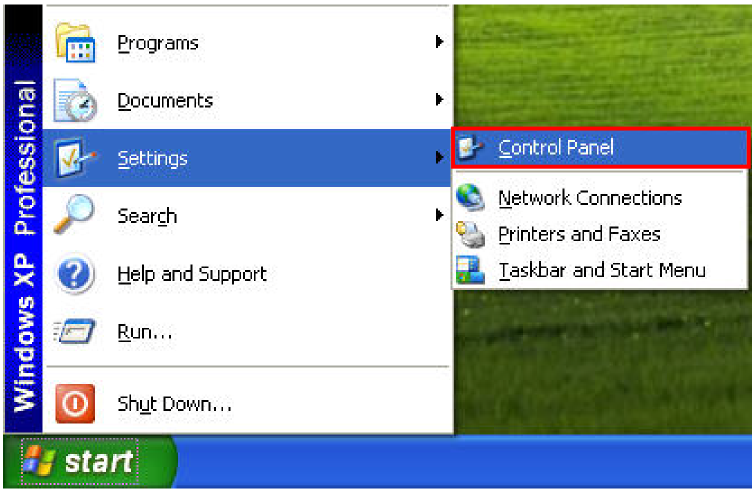
☐ Comm. Interrupt 3 times then ignore

After Ethernet IP address is set, the users can enter into the system menu to verify if the IP address is written correctly or not.

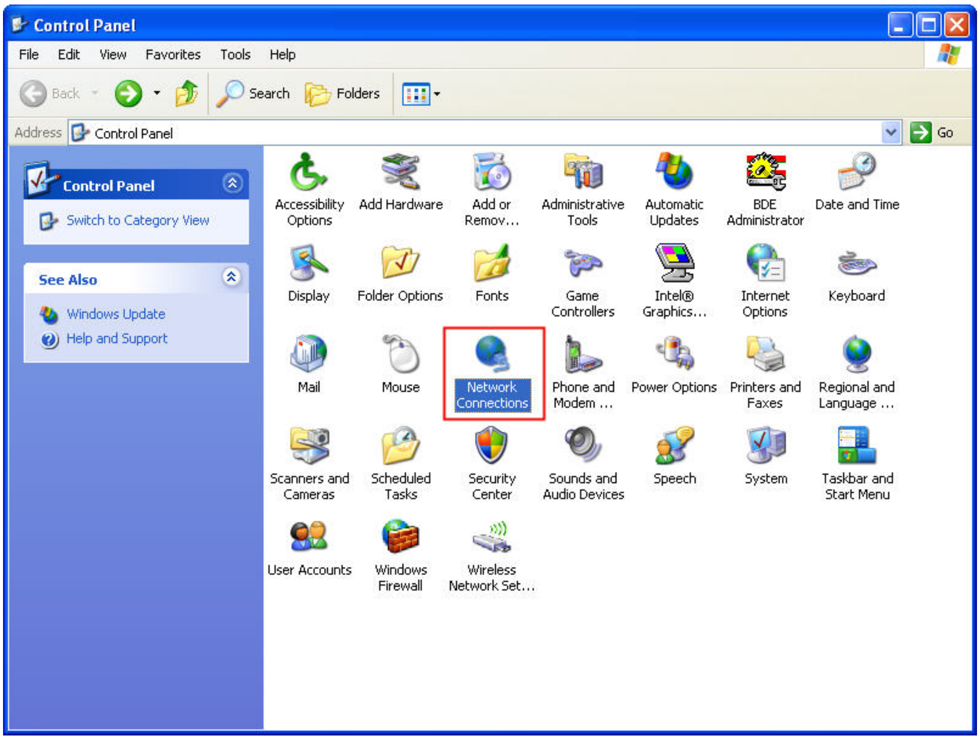

DOP-B
System Setting
Back
Home
BACK
DEC.
INC.
UP
DOWN
LEFT
RIGHT

HMI Name: HMI
DHCP : OFF
IP : 172. 16. 190. 11
Mask : 255. 255. 255. 0
Gateway : 0. 0. 0. 0
MAC : 0B: 00: 00: 00: 00: 00

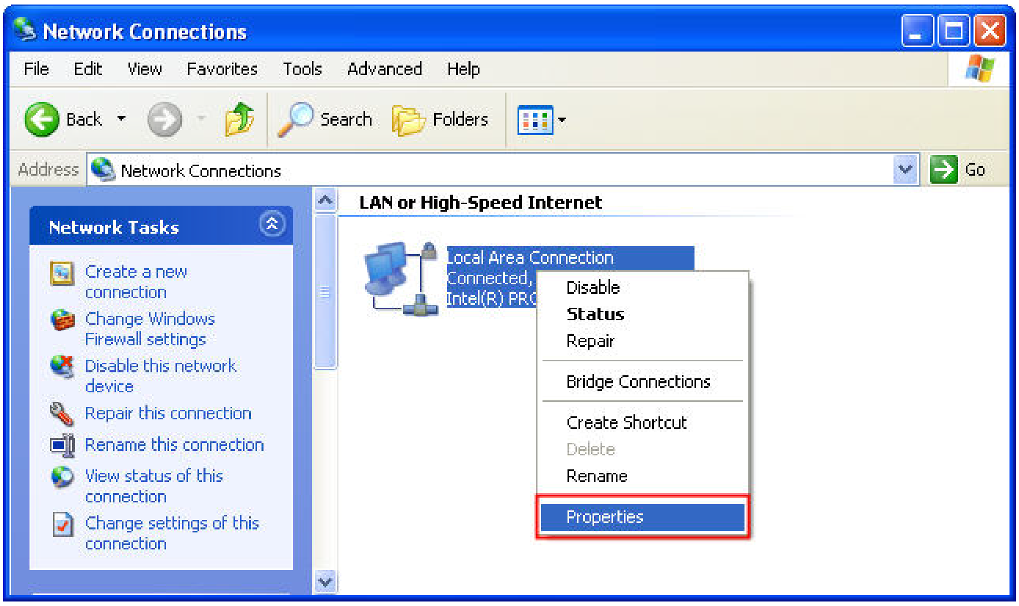
Then, observe the following instructions to complete PC networking settings.


Windows XP Professional
Programs
Documents
Settings
Search
Help and Support
Run...
Shut Down...
start
Control Panel
Network Connections
Printers and Faxes
Taskbar and Start Menu

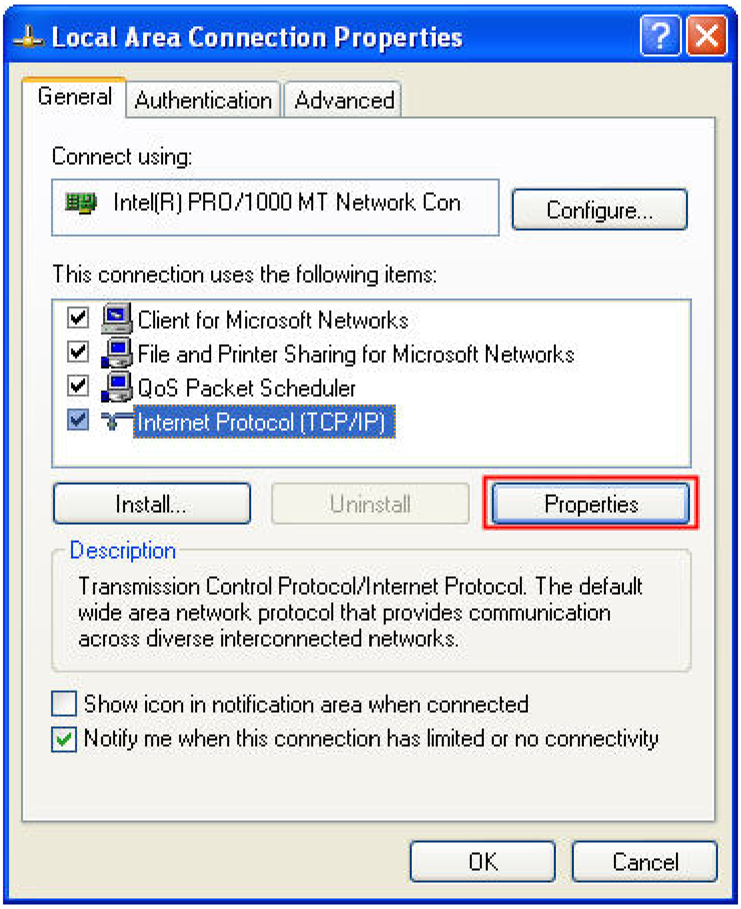
Power on PC and start Windows. Click **Start > Programs**, point to **Control Panel**, and then select **Network Connections**.


Control Panel
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
Address
Control Panel
Go
Control Panel
Switch to Category View
See Also
Windows Update
Help and Support
Accessibility Options
Add Hardware
Add or Remov…
Administrative Tools
Automatic Updates
BDE Administrator
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel® Graphics…
Internet Options
Keyboard
Mail
Mouse
Network Connections
Phone and Modem …
Power Options
Printers and Faxes
Regional and Language …
Scanners and Cameras
Scheduled Tasks
Security Center
Sounds and Audio Devices
Speech
System
Taskbar and Start Menu
User Accounts
Windows Firewall
Wireless Network Set…

Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.


Network Connections
File
Edit
View
Favorites
Tools
Advanced
Help
Back
Search
Folders
Address
Network Connections
Go
Network Tasks
Create a new connection
Change Windows Firewall settings
Disable this network device
Repair this connection
Rename this connection
View status of this connection
Change settings of this connection
LAN or High-Speed Internet
Local Area Connection
Connected,
Intel(R) PRO
Disable
Status
Repair
Bridge Connections
Create Shortcut
Delete
Rename
Properties

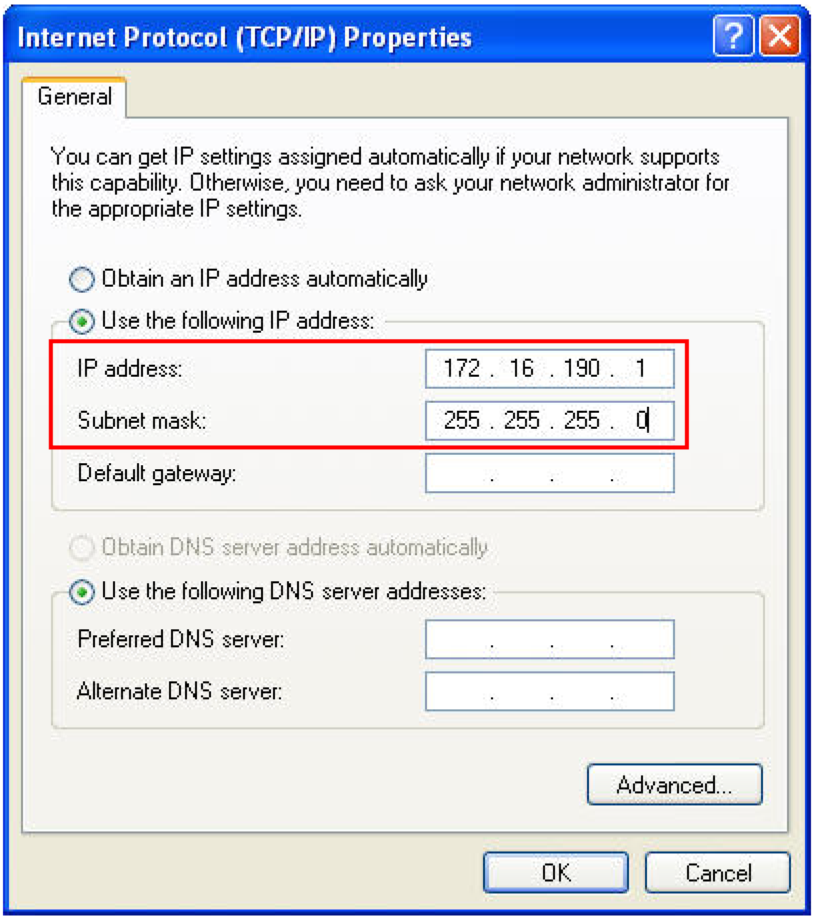
The **Local Area Connection Properties** dialog box will open. Use **General** tab to select **Internet Protocol (TCP/IP)**. Then, press **Properties** button.


Local Area Connection Properties
General
Authentication
Advanced
Connect using:
Intel(R) PRO/1000 MT Network Con
Configure...
This connection uses the following items:
☑ Client for Microsoft Networks
☑ File and Printer Sharing for Microsoft Networks
☑ QoS Packet Scheduler
☑ Internet Protocol (TCP/IP)
Install...
Uninstall
Properties
Description
OK
Cancel

Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in notification area when connected
☑ Notify me when this connection has limited or no connectivity

The **Internet Protocol (TCP/IP) Properties** dialog box will open. Choose **Use the following IP address** and enter the IP address numbers of the PC into the field of **IP address** and **Subnet mask**.



Internet Protocol (TCP/IP) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically

● Use the following IP address:

IP address: 172 . 16 . 190 . 1

Subnet mask: 255 . 255 . 255 . 0

Default gateway: . . .

○ Obtain DNS server address automatically

● Use the following DNS server addresses:

Preferred DNS server: . . .

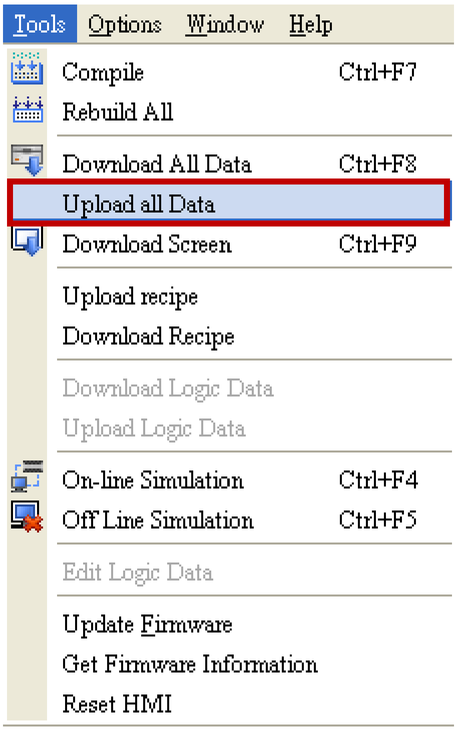
Alternate DNS server: . . .

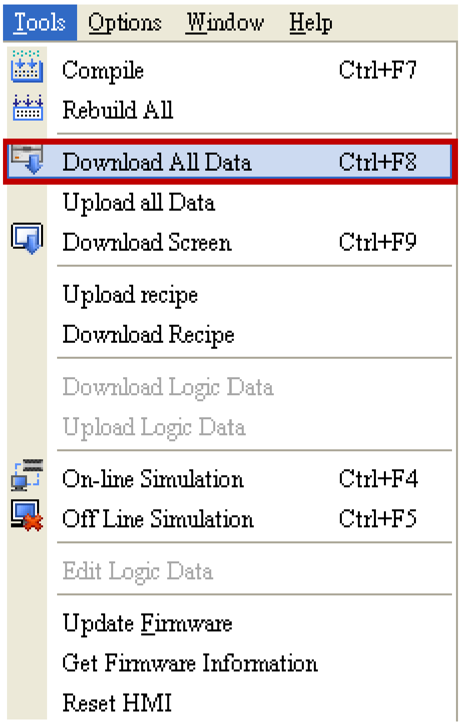
Then, press **OK** button to finish the settings.

Please note that if the IP address numbers of subnet masks of the PC and HMI are different, HMI may not be displayed in the list when finding node.

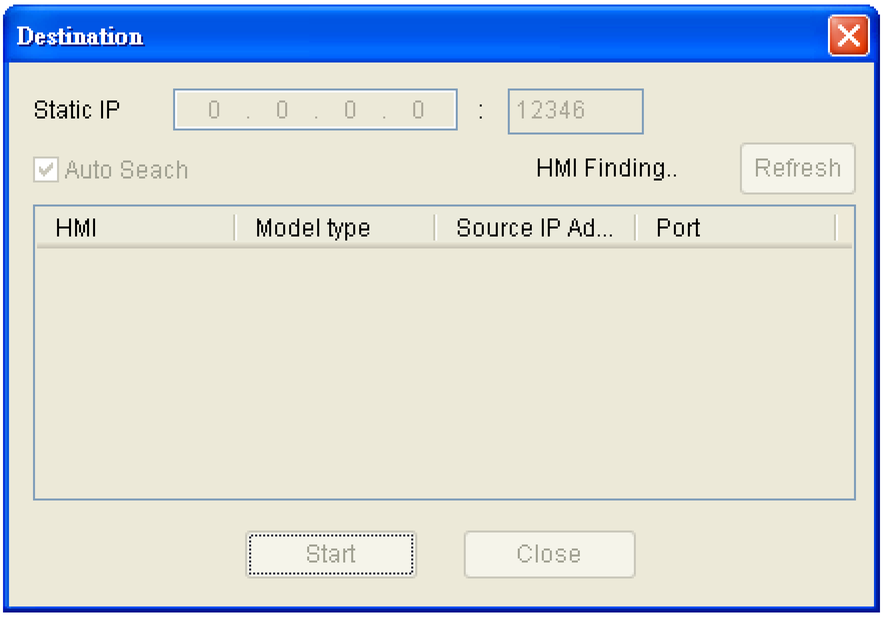
A.3 Compile and Upload / Download All Data

After completing PC networking settings, compile the editing program immediately. When compile operation is performed successfully, choose **Upload all Data** or **Download all Data** next.

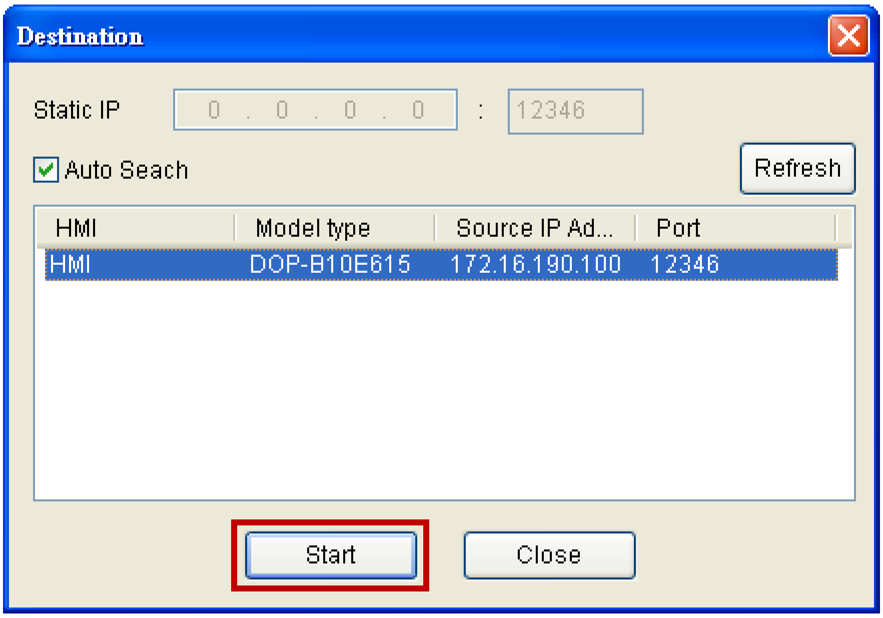

Tools
Options
Window
Help
Compile Ctrl+F7
Rebuild All
Download All Data Ctrl+F8
Upload all Data
Download Screen Ctrl+F9
Upload recipe
Download Recipe
Download Logic Data
Upload Logic Data
On-line Simulation Ctrl+F4
Off Line Simulation Ctrl+F5
Edit Logic Data
Update Firmware
Get Firmware Information
Reset HMI


Tools
Options
Window
Help
Compile Ctrl+F7
Rebuild All
Download All Data Ctrl+F8
Upload all Data
Download Screen Ctrl+F9
Upload recipe
Download Recipe
Download Logic Data
Upload Logic Data
On-line Simulation Ctrl+F4
Off Line Simulation Ctrl+F5
Edit Logic Data
Update Firmware
Get Firmware Information
Reset HMI

Then, the following dialog box will appear.


Destination
Static IP
0 . 0 . 0 . 0
12346
Auto Seach
HMI Finding..
Refresh
HMI
Model type
Source IP Ad...
Port
Start
Close

The users can check the box before **Auto Search**, and the system will detect the connecting HMI automatically.


Destination
Static IP
0 . 0 . 0 . 0
12346
☑ Auto Seach
Refresh
HMI
Model type
Source IP Ad...
Port
Start
Close

HMI	Model type	Source IP Ad...	Port
HMI	DOP-B10E615	172.16.190.100	12346

When the connecting HMI is found, press Start button, and the system will start to upload or download the screen data via Ethernet immediately.